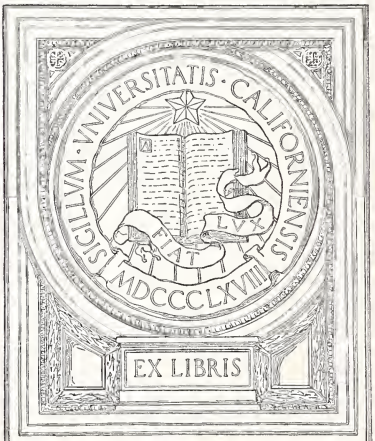
SCHOOL OF MEDICINE
LIBRARY



F-5

Digitized by the Internet Archive
in 2016

https://archive.org/details/journalofmedical41medi

THE JOURNAL

of the

MEDICAL ASSOCIATION OF GEORGIA

Published Monthly

Edited For The Association Under The Direction Of The Council Of The Association

Established 1911

David Henry Poer, M. D., *Editor*

Subscription Rates: $5 a Year, $1 a Single Copy

Volume XLI

January-December, 1952

MEDICAL ASSOCIATION OF GEORGIA

875 W. Peachtree, N. E., Atlanta

Author's Index

Author	Page No.
Adair, M. C., MD	459
Alexander, James L., MD	242
Allen, Eustace A., MD	348
Arnold, Maurice F., MD	484
Baehren, Paul F., MD	299
Baker, William R., MD	484
Bell, Rudolph, MD	281
Bennett, Ivan L., Jr., MD	48
Benton, Curtis D., MD	52
Bickers, Donald S., MD	99
Boston, Roy J., MD	24
Bradshaw, H. H., MD	4
Brown, Robert, MD	435
Butt, Arthur J., MD	185
Byers, Kathleen, MD	191
Callaway, Enoch, MD	19
Callaway, Enoch, MD	209
Callaway, Enoch, MD	460
Callaway, Enoch, MD	352
Callaway, Enoch, MD	502
Callaway, Enoch, MD	114
Callaway, Enoch, MD	308
Cary Freeman H., MD	48
Carter, Sandy B., MD	17
Cathcart, Don F., MD	492
Clarkson, L. M.	461
Cofer, Olin S., MD	90
Coggins, Robert P., MD	136
Conwell, H. Earle, MD	343
Cooper, Manuel N., MD	48
Corpe, R. F., MD	295
Daniel, Walter W., MD	263
Davis, David M., MD	400
Derivaux, Joseph H., MD	136
Dewey, Maybelle Jones	462
Dobes, William L., MD	14
Dorough, W. S., MD	64
Dowman, Charles E., MD	109
Dunstan, Edgar M., MD	147
Dunstan, Edgar M., MD	404
Dunstan, Edgar M., MD	21
Dunstan, Edgar M., MD	212
Edwards, Ernest G., MD	198
Ellison, Robert G., MD	242
Equen, Murdock, MD	435
Evans, Albert L., MD	90
Flanagin, W. Stewart, MD	128
Fowler, C. Dixon, MD	138
Freedman, Milton H., MD	456
Friedewald, William F., MD	390
Funkhouser, Wm. Littell, MD	61
Gafford, August, MD	347
Galvin, W. H., MD	480
Golkowski, Wm. V., MD	541
Good, Wm. H., Jr., MD	54
Green, J. A., MD	97
Griffin, Eugene L., MD	541
Gude, A. V., MD	480
Harrold, Thomas, MD	336
Hatcher, Milford B., MD	556
Hauser, Ernst, A., Ph.D.	185
Hendricks, Willis M., MD	397
Henry, Charles M., MD	59
Henry, Charles M., MD	54
Hydrick, Peter, MD	316
Johnson, McClaren, MD	439
Kasserman, W. H., MD	295
Keller, A. Paul, Jr., MD	347
King, Richard, MD	545
King, Richard, MD	291
Kite, J. Hiram, MD	291
Knight, Arthur M. Jr., MD	487
Lamb, Charles C., MD	279
Lee, C. Marshall, Jr., MD	233
Lipton, Harry R., MD	85
Lucas, Paul, MD	495
Mabon, Robert F., MD	142
Mass, Max, D	556
Massee, Joseph C., MD	7
McElroy, Joseph D., MD	311
McLoughlin, Chris, J., MD	498
McRae, D. B., MD	485
Mitchell, George L. Jr., MD	48
Moore, Wm. W., MD	55
Morrison, Howard, J., MD	392
Murphy, Fred E., MD	552
Neighbors, J. B., MD	97
Nicholson, George T., MD	54
Norris, Jack C., MD	135
Petrie, Lester M., MD	62
Phillips, Hayward S., MD	259
Priestly, James T., MD	431
Pruce, Arthur M., MD	305
Raiford, Morgan B., MD	253
Randsell, H. T., MD	295
Reavis, W. F., MD	184
Rice, Guy V., MD	26
Rieser, Charles, MD	356
Rieth, Paul L., MD	194
Roach, George, MD	435
Roberts, M. Hines, MD	299
Ross, Robert A., MD	283
Rumble, Lester, Jr., MD	480
Schenck, H. C.	354
Seifter, Joseph, MD	185
Sellers, T. F., MD	309
Selman, W. A., MD	267
Simpson, James, R., MD	55
Singer, A. G., MD	54
Snell, Albert, M., MD	202
Steadman, Henry E., MD	81
Stetler, C. Joseph, MD	265
Stewart, J. Benham, MD	336
Stinson, Roy F., MD	281
Thorek, Philip, MD	43
Thoroughman, James C., MD	259
Tift, Henry H., MD	318
Turner, August, MD	287
Turner, John W., MD	287
Venable, John H., MD	151
Walker, Exum, MD	55
Walker, John S., MD	545
Weaver, J. Calvin, MD	209
Weiss, Edward, MD	93
Weiss, Edward, MD	536
Wilkins, Samuel A., Jr., MD	9
Williams, Ralph C., MD	560
Wilson, William L., MD	312
Wood, D. L., MD	268
Wood, Frank F., MD	279
Wyatt, C. J., Jr., MD	255

Subject Index

This is the index to all the reading matter in the Journal of the Medical Association of Georgia. The author's name appears in brackets following each title. The letter "E" following the title of an article indicates that the article is an Editorial.

— A —

ABDOMEN:
- The Acute Abdomen (Thorek) 43
- Abdominal Puncture as a Diagnostic Aid (Henry) 59

ACCIDENTS:
- The Role of Cerebral Angiography in the Management of Cerebral Vascular Accidents (Simpson, Walker, Moore) 55
- Casualty Handling in Emergencies (Dowman) 109
- Childhood Accidents and Their Prevention (Morrison) 392

ADENOMA:
- Duodenal Adenoma: Report of a Case (Henry, Nicholson, Singer, Good) 54

ADRENOCORTICAL:
- Adrenocortical Insufficiency, Observed in Three Male Infants in One Family (Roberts, Baehrens) 299

88799

ALCOHOL, METHYL:
Methyl Alcohol Poisoning, E ... 37
Methyl Alcohol Poisoning: An Account of the 1951 Atlanta Epidemic (Cooper), Mitchell, Bennett, Cary) ... 48
AMERICAN MEDICAL ASSOCIATION:
The AMA—A Report on the Los Angeles Meeting, E ... 2
VI Our Twenty-Five Dollars, E ... 39
AMA Dues for 1952, E ... 42
AMA Medical PR Institute, E ... 428
Medical Civil Defense Activities of the American Medical Association (Stetler) ... 265
The 101st Annual Session of the American Medical Association (Tift) ... 318
You, the AMA and the 83rd Congress, E ... 478
ANATOMY:
Cancer Therapy and Pathological Anatomy, E ... 125
Anatomy Before Vesalius (Weaver) ... 209
ANEMIA:
Transitory Ocular Divergence Paralysis Due to Sickle Cell Anemia (Benton) ... 52
Aplastic Anemia Following the Administration of Chloramphenicol (Freedman) ... 456
ANESTHESIA:
Anesthesia for Femoral Neck and Intertrochanteric Fractures (Byers) ... 191
Anesthesia for Peroral Endoscopy (Rumble, Gude and Goluin) ... 480
Use of Hyaluronidase as an Adjunct to Novocain in Pudendal Block Anesthesia (Griffin, Golkowski) ... 541
ANGIOGRAPHY:
See Artery, Roentgen Rays
ANTIBIOTICS:
The Use of Sulfa Drugs and More Recent Mold Antibiotics in Pediatrics (Fowler) ... 138
ARTERY:
The Role of Cerebral Angiography in the Management of Cerebral Vascular Accidents (Simpson, Walker, Moore) ... 55
Politeal Artery Occlusion Presumably by Pressure from Organized Venous Clot (Neighbors and Green) ... 97
ARTERITIS:
Temporal Arteritis, Report of a Case with Pleocytosis and Total Blindness (Knight) ... 487
ATLANTA:
Methyl Alcohol Poisoning: An Account of the 1951 Atlanta Epidemic (Cooper, Mitchell, Bennett, Cary) 48
ATRESIA:
Congenital Atresia of the Esophagus and Esophagotracheal Fistula (King, Walker) ... 545

— B —

BACKACHE:
Backache in Women, E ... 79
Back Pain (Rieth) ... 194
BILE DUCTS:
Operative Cholangiograph (Hatcher and Mass) ... 556
BLINDNESS:
Temporal Arteritis, Report of a Case with Pleocytosis and Total Blindness (Knight) ... 487
BLOOD PRESSURE, HIGH:
Emotional Factors in Hypertension (Weiss) ... 93
BLOOD VESSELS:
The Role of Cerebral Angiography in the Management of Cerebral Vascular Accidents (Simpson, Walker, Moore) ... 55
BOOK REVIEWS:
Cortisone:
Untoward Reactions of Cortisone and ACTH (Derbes, Weiss, Thomas) ... 174
Untoward Reactions of Cortisone and ACTH (Derbes, Weiss, Thomas) ... 331
Culdoscopy:
Culdopscopy (Decker) ... 526
Diagnosis:
Physical Diagnosis (Walker) ... 473
Radiologic Diagnosis of the Lower Urinary Tract (Beard) ... 522
Disease:
Standard Nomenclature of Disease and Operations 174
Endocrinology:
Office Endocrinology (Greenblatt) ... 275
Gynecology:
Psychosomatic Gynecology (Kroger, Freed) ... 173
Health:
The United States Public Health Service (Williams) 175
The Scalp in Health and Diseases (Behrman) ... 275
Hygiene:
Rosenau Preventive Medicine and Hygiene (Maxcy) 175
Medicine:
Rosenau Preventive Medicine and Hygiene (Maxcy) 175
Neurology:
A Textbook of Clinical Neurology (Wechsler) ... 175
The Treatment of Injuries to the Nervous System (Munro) ... 474
Orthopedics:
A Textbook on Orthopedics (Howorth) ... 274
Peptic Ulcer:
Peptic Ulcer: Clinical Aspects, Diagnosis and Management (Sandweiss and others) ... 35
Pharmacology:
Textbook of Pharmacology ... 425
Pharmacology in Clinical Practice (Beckman) ... 472
Physician:
The Specialties in General Practice (Cecil) ... 73
Physicians Handbook (Krupp, Sweet, Armstrong Jawetz) ... 473
Doctors in Blue (Adams) ... 383
Pregnancy:
The Toxemias of Pregnancy (Dieckmann) ... 524
Psychosomatic Medicine:
Psychosomatic Gynecology (Kroger, Freed) ... 173
Refraction:
Principles of Refraction (Beach) ... 526
Textbook of Refraction (Tait) ... 176
Statistics:
Elementary Medical Statistics (Mainland) ... 331
Surgery:
Surgical Practice of the Lahey Clinic (Lahey Clinic Staff) ... 74
Brain Surgery (Sharpe) ... 522
Therapeutics:
The Treatment of Injuries to the Nervous System (Munro) ... 474
Cardiac Therapy (Stewart) ... 520
Miscellaneous:
Pardon My Sneeze (Millman) ... 522
Estudos Cirurgicas 6th Serie Sao Paulo Editora S.A. (Riberio) ... 524
BRAIN:
Clinical Electroencephalography: A Diagnostic and Prognostic Aid (Bickers) ... 99
BREAST:
Biopsy of Breast (Callaway) ... 19
The Use of Hormones in the Treatment of Breast Carcinoma (Wood) ... 268

— C —

CALCULI:
Renal Lithiasis: Its Treatmentand Prevention by Increasing the Protective Urinary Collids with Hyaluronidase (Butt, Hauser, Seifter) ... 185
CANCER:
Surgery in the Treatment of Cancer of the Maxillary Antrum (Wilkins) ... 9
Biopsy of Breast (Callaway) ... 19
Incidence of Early Malignance in Uteri Removed for Benign Conditions (Cofer, Evans) ... 90
Radical Procedures as Palliative Measures in Carcinoma of the Gastrointestinal Tract (Callaway) ... 114
Cancer Therapy and Pathological Anatomy, E ... 120
Cancer of the Stomach: Objectives and Results of Efforts to Increase Curability (Priestly) ... 431
Cancer of the Larynx (Equen, Roach, Brown) ... 435
Carcinoma of the Prostate (Callaway) ... 460
Cancer of the Tongue (Callaway) ... 209
Problems in the Diagnosis of Bronchogenic Carcinoma (Ellison, Alexander) ... 242

The Use of Hormones in the Treatment of Breast Carcinoma (Wood) 268
Primary Carcinoma of the Liver, A Review and Case Report in a Colored Juvenile (Lamb, Wood) 279
The Relationship Between Lacerations of the Cervix and Carcinoma of the Cervix (Callaway) 308
Carcinoma of the Cervix, Results of Radiation Therapy (Harrold and Stewart) 336
Extracts from the Last Quadrennial Report of the Memorial Center for Cancer and Allied Diseases with Comments (Callaway) 352
Pregnancy of Six Months Complicated by Metastatic Melanoma (Hendricks) 397
The Psychological Care of the Cancer Patient (Callaway) 502

CARCINOMA:
See Cancer
CARDIAC:
See Heart
CERVIX:
See Uteri
CHILDREN:
Georgia's Program for the Crippled Child (Funkehouser) 61
Acute Hemorrhagic Nephritis in Children (Cathcart) 492
CHLORAMPHENICOL:
The Danger of Chloramphenicol Therapy, E 386
Aplastic Anemia Following the Administration of Chloramphenicol (Freedman) 456
CHOLANGIOGRAPH:
See Bile Ducts
CHOLECYSTIC:
See Gall Bladder
CIVIL DEFENSE:
Civil Defense: The National Medical Conference and the Georgia Health Plan (Dunstan) 21
Public Health and Civil Defense (Petrie) 62
Appointments in the State and Local Civil Defense Volunteer Medical Service Group (Dunstan) 147
Milk Protection in a Civil Defense Program (Clarkston) 461
District and County Civil Defense Health Services Conferences (Dunstan) 212
Medical Civil Defense Activities of the American Medical Association (Stetler) 265
The Challenge of Civil Defense Health Services—The National Picture (Wilson) 312
Civil Defense Health Services Plan Supply and Operations (Dunstan) 404
CLIMACTERIC:
See Menopause
CONCEPTION:
Restoring Conceptive Ability: Report of a Case (Adair) 459

— D —

DEATHS:
Anderson, William Willis 121
Andrews, Agnew 72
Armstrong, T. Blake 33
Baird, Noah W. 328
Barton, John J. 379
Brewer, Asbury M. 272
Brown, Herman Dobbs 171
Brown, Stewart Dixon 328
Clements, Henry W. 121
Chandler, William Vance 470
Cheek, Pratt 470
Cobb, Tyrus Raymond 470
Collier, Thomas Jefferson 171
Colson, Dell Cassidy 272
Daniel, Walter Wright 122
Deal, Ben A. 516
Dickie, Emmett H. 33
Flournoy, Harrison Clinton 272
Frederick, Donald B. 329
Garner, James Ryan 422
Garner, James Samuel 223
Greene, Edgar Hill
Hair, William B. 516
Hair, William B. 470
Hall, Thomas Marshall 122
Harrell, David Braxton 273
Hays, W. C. 470
Heyser, David Thomas 122
Hines, Joseph H. 33
Huckaby, A. H. 171
Humphrey, Thomas S. 470
Humphreys, Alexander S. 470
Hurley, Thomas A. 33
Hutchings, Ernest H. 33
Hutchinson, Lee Roy 329
Isbell, Jesse E. D. 273
Jones, Henry 273
Kenyon, Steve Paschal, E 76
Lanier, John Roy 379
Lanier, Leon I. 33
Lord, Columbus B. 122
Manget, James D. 470
Massoud, Mittry A. 273
McKey, Earle S. 273
Miller, Harold Applegate 576
Morgan, David Emmett 223
Morgan, David Emmett 171
Murphy, Eugene Edmund, E 182
Norton, Walter Abell 33
Owensby, Newdigate Moreland 423
Peacock, John Domingos 273
Peeler, Julian Edward 223
Peeler, Julian Edwin 122
Petit, James K. 329
Reynolds, Horace Maxwell 34
Rhodes, William James 171
Schanze, Raymond Andrew 273
Shaw, M. F. 223
Smith, Racy Hawkins 273
Spooner, John Ira 171
Stewart, J. A. 223
Spruell, T. M. 423
Taylor, John Cephas 223
Tidmore, Joseph C. 72
Tyre, J. Lawson 516
Vinton, Luther Mansfield 379
Vogt, Elkin 273
Wilkinson, William Lee 273
Williams, Virgil Gaines 34
Wilson, James I. 122

DIABETES:
Management of the Diabetic Patient (Wyatt) 255
The Diabetes Problem (McLoughlin) 498
DIAGNOSIS:
Abdominal Puncture as a Diagnostic Aid (Henry) 59
Clinical Electroencephalography: A Diagnostic and Prognostic Aid (Bickers) 99
Diagnosis—USA, E 428
Diagnosis of Cholecystic Diseases, E 180
Problems in Diagnosis of Bronchogenic Carcinoma (Ellison, Alexander) 242
Therapeutic and Diagnostic Use of Procaine (Phillips, Thoroughman) 259
Early Diagnosis and Treatment of Congenital Dislocation ofthe Hip, Review of Two Hunred Cases (Kite, King) 291
DOCTORS:
See Physicians
DRUGS:
The Use of Sulfa Drugs and More Recent Mold Antibiotics in Pediatrics (Fowler) 138
DUODENAL:
Duodenal Adenoma: Report of Case (Henry, Nicholson, Singer, Good) 54

— E —

ELECTROENCEPHALOGRAPHY:
See Brain
ELECTROLYTES:
Electrolytes in Medicine and Surgery, E 37

EMERGENCIES:
See Accidents
EMOTIONS:
Emotional Factors in Hypertension (Weiss) 93
EPIDEMIC:
Methyl Alcohol Poisoning: An Account of the 1951 Atlanta Epidemic (Cooper, Mitchell, Bennett, Cary) 48
ESOPHAGUS:
Congenital Atresia of the Esophagus and Esophagotracheal Fistula (King and Walker) 545
EYE:
Transitory Ocular Divergence Paralysis Due to Sickle Cell Anemia (Benton) 52
Eye Lashes Embedded in the Lens (Raiford) 253

— F —

FEMUR:
Anesthesia for Femoral Neck and Intertrochanteric Fractures (Byers) 191
FEVER BLISTERS:
The Etiology and Treatment of Fever Blisters (Norris) 135
FRACTURES:
Anesthesia for Femoral Neck and Intertrochanteric Fractures (Byers) 191
Certain Problems in Fracture Treatment (Conwell) 343
Intramedullary Fixation (Murphy) 552

— G —

GALL BLADDER:
Diagnosis of Cholecystic Diseases, E 180
GASTRECTOMY:
See Stomach
GASTROINTESTINAL TRACT:
See Intestines, Stomach
GENERAL PRACTICE:
See Physician
GEORGIA:
Sporotrichosis in Georgia (Dobes) 14
Civil Defense: The National Medical Conference and the Georgia Health Plan (Dunstan) 21
Present Status of Typhus Fever in Georgia (Boston) 24
Georgia's Program for the Crippled Child (Funkhouser) 61
Appointments in the State and Local Civil Defense Volunteer Medical Service Corps (Dunstan) 147
An Invitation to the General Hospitals in Georgia to Form a Section of General Practice (Hydrick) 316
GEORGIA PLAN:
More About the Georgia Plan, E 42
Civil Defense: The National Medical Conference and the Georgia Health Plan (Dunstan) 21
GRANULOMA:
Eosinophilic Granuloma of Rib (Carter) 17

— H —

HEAD:
Management of Acute Head Injuries (Mabon) 142
HEADACHE:
The Role of the Greater Occipital Nerve in the Production of Headache (Edwards) 198
HEALTH:
School Health (Venable) 151
The Physician and Rural Health, E 124
HEART:
Vocational Rehabilitation of Cardiac Patients (Massee) 7
HEMATURIA:
Hematuria (Stinson) 281
HEMORRHAGE:
Hysterectomy for Uncontrollable Postpartum Hemorrhage (Daniel) 263
HEMORRHOIDECTOMY:
Reducing Pain in Hemorrhoidectomy (Steadman) 81
HERMAPHRODITISM:
Hermaphroditism, E 477
HIP:
Early Diagnosis and Treatment of Congenital Dislocation of the Hip, Review of Two Hundred Cases (Kite) 291
HISTORY:
The Early History of Emory University Hospital (Dewey) 462
HORMONES:
The Use of Hormones in the Treatment of Breast Carcinoma (Wood) 268
HOSPITALS:
X-Ray Services and Hospital Care, E 124
The Early History of Emory University Hospital (Dewey) 462
Dedication of Hughes Spalding Pavilion of Grady Memorial Hospital, E 207
An Invitation to the General Hospitals in Georgia to Form a Section of General Practice (Hydrick) 316
Should the Doctor Support the Hospital? E 388
One Year of Operating Experiences of 17 New Hospitals Built Under The Hospital Facilities Construction Program (Hill-Burton) (Williams) 560
HYALURONIDASE:
Use of Hyaluronidase as an Adjunct to Novocain in Pudendal Block Anesthesia (Griffin, Golkowski) 541
HYDRAZIDE:
Isonicotine Acid Hydrazide in (INAH) in Tuberculosis, E 231
HYPERTENSION:
See Blood Pressure, High
HYSTERECTOMY:
Hysterectomy for Uncontrollable Postpartum Hemorrhage (Daniel) 263

— I —

INFANTS:
Intestinal Obstruction in the Newborn Infant (Lee) 233
INSURANCE:
More About the Georgia Plan, E 42
The Ultimate Aim of Voluntary Prepayment Medical Care Plans (Dorough) 64
INTESTINES:
Intestinal Obstruction in the Newborn Infant (Lee) 233
Surgery of the Upper Gastrointestinal Tract (Hand) 395

— K —

KIDNEY:
Renal Lithiasis: Its Treatment and Prevention by Increasing the Protective Urinary Colloids with Hyaluronidase (Butt, Hauser, Seifter) 185
Artificial Kidney, E 533

— L —

LACERATIONS:
The Relationship Between Lacerations of the Cervix and Carcinoma of the Cervix (Callaway) 308
LARYNX:
Cancer of the Larynx (Equen) 435
LENS:
Eye Lashes Embedded in Lens (Raiford) 253
LITHIASIS:
See Calculi
LIVER:
Primary Carcinoma of the Liver, A Review and Case Report in a Colored Juvenile (Lamb, Wood) 279
LOS ANGELES:
The AMA—A Report on the Los Angeles Meeting, E 2

— M —

MALARIA:
Primaquine: A New Drug for the Radical Cure of Relapsing Vivax Malaria, E 126
MARRIAGE:
"Marriage Mills," Doctor Support Necessary to Cutlaw, E 2
MANAGEMENT:
Management of the Diabetic Patient (Wyatt) 255
MATERNITY:
First Meeting of the Maternal Care Committee 27
MAXILLARY ANTRUM:
Surgery in the Treatment of Cancer of the Maxillary Antrum (Wilkins) 9
MEDICAL CARE PLAN:
See Insurance

MEDICAL ASSOCIATION OF GEORGIA:
Annual Session:
The 1952 Annual Session, E 123
The 1002nd Annual Session of the MAG 154
Was Our 1952 Annual Session a Success? E 181
Preliminary Program of 1953 Annual Session.
Auxiliary:
The 27th Annual Convention of the Woman's Auxiliary of the MAG 154
The Auxiliary Looks to the Future, E 429
Committees:
First Meeting of the Maternal Care Committee 27
Meeting of the Committee on Constitution and By-Laws 115
Minutes of the Combined Meeting of the Committees on Public Policy and Legislation of MAG and Fulton County Society 467
Meeting of the Executive Committee of the MAG 270
Calling All Committee Chairmen—Your Job for the Year, E 385
Report of Committee on Scientific Works at Savannah, August 9, 1952 420
Committee Appointments for 1952-1953 506
Constitution and By-Laws:
Your New Constitution and By-Laws, E 77
Council:
Meeting of the Council of the MAG 66
Abstract of Proceedings of the Council of the Medical Association of Georgia at the 102nd Annual Session in Atlanta May 11-14, 1952 410
Report of MAG Council at Atlanta June 22, 1952 419
Report of MAG Executive Council at Savannah August 9, 1952 420
Report of MAG Council Meeting of October 5, 1952, in Atlanta 508
County Society:
The County Society: Its Price of Membership, E 230
Journal:
Journal Production Techniques to Get Full-Time Supervision 326
Rx for Your Journal, E 335
Editorial Board Meeting of the Journal of the MAG 565
Informal Press Conference 565
1952 Cumulative Index 573
Miscellaneous:
Organization for 1952-1953 213
Secretary's Report 215
Treasurer's Report 218
Fee Schedule for Workmen's Compensation Cases 218
Presentation of the President's Gold Key to William Farrell Reavis (Selman) 267
The Interprofessional Council, E 278
First Annual Secretaries Conference: An Aid to "Organized Medicine", E 535
President's Page 466
List of District and County Officers 7A
MEDICINE:
Electrolytes in Medicine and Surgery, E 37
A Better Practice of Medicine (Reavis) 184
The GP and the Specialist, E 228
Materia Medica, E 278
Some Observations of Socialized Medicine in England (McElroy) 311
The Doctor of Tomorrow and Federal Medical Services (Rieser) 356
The Psychosomatic Concept in General Medicine (Weiss) 536
MENOPAUSE:
The Care of the Female in the Climacteric (Ross) 283
MILK:
Milk Protection in a Civil Defense Program (Clarkston) 461
MISCELLANEOUS:
Introducing Miss 1952, E 1952
Lord, We Cry to Thee, E 75
Lost and Found, E 75
Eternal Vigilance, E 78
Cast Your Vote, E 430
The Specialist and House Calls, E 180
What Price Politics? E 227
Give the Public More Information Like This, E 230
Could It Have Happened Here? 277
Money 277
Of Professional Ethics 534
MOUTH:
Plastic Repair of Defects of the Mouth (Flanagin) 128

—N—

NASAL:
See Nose
NATIONAL:
Civil Defense: The National Medical Conference and the Georgia Health Plan (Dunstan) 21
A Report on the National Conference on Physicians and Schools (Rice) 26
NEPHRITIS:
Acute Hemorrhagic Nephritis in Children (Cathcart) 492
NECK:
Anesthesia for Femoral Neck and Intertrochanteric Fractures (Byers) 191
NERVE:
The Role of the Greater Occipital Nerve in the Production of Headache (Edwards) 198
NOSE:
Is the Nasal Cavity Sterile, (Gafford and Keller) 347
NOVOCAINE:
See Procaine Hydrochloride

—O—

OLD AGE:
Surgery in the Older Patient (Bradshaw) 4
Chronically Ill "Olsters": The Number One Medical Problem, E 333
Longevity (Allen) 348
OTITIS:
Otitis Externa Etiology and Treatment (Lucas) 495

—P—

PANCREATITIS:
Some Clinical Notes on Chronic Relapsing Pancreatitis (Snall) 202
PARALYSIS:
Transitory Ocular Divergence Paralysis Due to Sickle Cell Anemia (Benton) 48
Tick Paralysis (Coggins) 136
PAIN:
See Also Headache, Backache
Reducing Pain in Hemorrhoidectomy (Steadman) 81
PEDIATRICS:
The Use of Sulfa Drugs and More Recent Mold Antibiotics in Pediatrics (Fowler) 138
PEPTIC ULCERS:
One Hundred Consecutive Partial Gastrectomies for Benign Peptic Ulcers (Turner and Turner) 287
PHYSICIANS:
Doctor Support Necessary to Outlaw "Marriage Mills", E 2
A Report on the National Conference on Physicians and Schools (Rice) 26
Governor's Doctors Day Proclamation, E 80
The Physician and Rural Health, E 124
The GP and the Specialist 2
The Physician's Community, E 229
Recent Advances in Physical Therapy Applied to General Practice (Pruce) 305
An Invitation to the General Hospitals in Georgia to Form a Section of General Practice (Hydrick) 316
The Doctor of Tomorrow and Federal Medical Services (Rieser) 356
Should the Doctor Support the Hospital? E 338
And Yet They Practice, E 479
POISONING:
Methyl Alcohol Poisoning, E 37
Methyl Alcohol Poisoning: An Account of the 1951 Atlanta Epidemic (Cooper, Mitchell, Bennett, Cary) 48
POLYPOSIS:
Familial Polyposis (McRae) 485

PREGNANCY:
Pregnancy of Six Months Complicated by Metastatic Melanoma (Hand) 397
Abdominal Pregnancy With Survival of Mother and Infant (Arnold and Baker) 484
PROCAINE:
Therapeutic and Diagnostic Use of Procaine (Phillips, Thoroughman) 259
PROCAINE HYDROCHLORIDE:
Use of Hyaluronidase as an Adjunct to Novocain in Pudendal Block Anesthesia (Griffin, Golkowski) 541
PROGNOSIS:
Clinical Electroencephalography: A Diagnostic and Prognostic Aid (Bickers) 99
PROSTATE:
Carcinoma of the Prostate (Callaway) 460
Prostatic Surgery and The Results Which Should Be Expected of It (Davis) 400
PRIMAQUINE:
Primaquine: A New Drug for the Radical Cure of Relapsing Vivax Malaria, E 126
PSYCHIATRY:
Shock Therapy and Psychiatry: A Review of the Literature and Results o f Treatment (Lipton) 85
PSYCHOSOMATIC MEDICINE:
The Psychosomatic Concept in General Medicine (Weiss) 536
PUBLIC HEALTH:
See Health
PUBLIC RELATIONS:
Medical Public Relations: 1952 Style, E 3
AMA Medical PR Institute, E 428
Public Relations Is Not a Public Fight, E 334

— R —

REHABILITATION:
Vocational Rehabilitation of Cardiac Patients (Massee) 7
Vocational Rehabilitation, E 389
RENAL:
See Kidneys
RIB:
Eosinophilic Granuloma of Rib (Carter) 17
ROENTGEN RAYS:
The Role of Cerebral Angiography in the Management of Cerebral Vascular Accidents (Simpson, Walker, Moore) 55
X-Ray Services and Hospital Care, E 124
RURAL HEALTH:
See Health

— S —

SCHOOLS, MEDICAL:
A Report on the National Conference on Physicians and Schools (Rice) 26
Statement from Emory on Medicine Development Plans, E 387
SHOCK:
Shock Therapy in Psychiatry: A Review of the Literature and Results of Treatment (Lipton) 85
SPOROTRICHOSIS:
Sporotrichosis in Georgia (Dobes) 14
STOMACH:
Cancer of the Stomach: Objectives and Results of Efforts to Increase Curability (Priestly) 431
Prolapsing Gastric Mucosa: A Review of 117 Cases in a Private Practice (Johnson) 439
One Hundred Consecutive Partial Gastrectomies for Benign Peptic Ulcers (Turner and Turner) 287
Surgery of the Upper Gastrointestinal Tract (Hand) 395
SURGERY:
Surgery in the Older Patient (Bradshaw) 4
Surgery in the Treatment of Cancer of the Maxillary Antrum (Wilkins) 9
Electrolytes in Medicine and Surgery, E 37
The Acute Abdomen (Thorek) 43
Plastic Repair of Defects of the Mouth (Flanagin) 128
The Surgical Treatment of Residual Fibrocaseous Nodules in Pulmonary Tuberculosis (Corpe, Kasserman, Randsell) 295
Prostatic Surgery and the Results Which Should Be Expected of It (Davis) 400
Surgery of the Upper Gastrointestinal Tract (Hand) 395

— T —

THERAPEUTICS:
Surgery in the Treatment of Cancer of the Maxillary Antrum (Wilkins) 9
The Etiology and Treatment of Fever Blisters (Norris) 135
Renal Lithiasis: Its Treatment and Prevention by Increasing the Protective Urinary Colloids With Hyaluronidase (Butt, Hauser, Seifter) 185
Therapeutic and Diagnostic Use of Procaine (Phillips and Thoroughman) 259
The Use of Hormones in the Treatment of Breast Carcinoma (Wood) 268
Early Diagnosis and Treatment of Congenital Dislocation of the Hip, Review of Two Hundred Cases (Kite and King) 291
The Surgical Treatment of Residual Fibrocaseous Nodules in Pulmonary Tuberculosis (Corpe, Kasserman, Randsell) 295
Recent Advances in Physical Therapy Applied to General Practice (Pruce) 305
Carcinoma of the Cervix, Results of Radiation Therapy (Harrold, Stewart) 336
The Danger of Chloramphenicol (Chloromycetin) Therapy, E 386
Otitis Externa Etiology and Treatment (Lucas) 495
TICK:
Tick Paralysis (Coggins) 136
TONGUE:
Cancer of the Tongue (Callaway) 209
TRAUMA:
Management of Acute Head Injuries (Mabon) 142
TREATMENT:
See Therapeutics
TUBERCULOSIS:
Isonicotine Acid Hydrazide in (INAH) in Tuberculosis (Payne), E 231
The Surgical Treatment of Residual Fibrocaseous Nodules in Pulmonary Tuberculosis (Corpe, Kasserman, Randsell) 295
Declining Tuberculosis Death Rate Not an Index of Control (Schenck) 354
TYPHUS FEVER:
Present Status of Typhus Fever in Georgia (Boston) 24

— U —

UTERI:
Incidence of Early Malignancy in Uteri Removed for Benign Conditions (Cofer, Evans) 90
Relationship Between Lacerations of the Cervix and Carcinoma of the Cervix (Callaway) 308
Carcinoma of the Cervxi—Results of Radiation Therapy (Harrold, Stewart) 336

— V —

VASCULAR:
See Blood Vessels
Veins:
Popliteal Artery Occlusion Presumably by Pressure from Organized Venous Clot (Neighbors, Green) 97
VENOUS CLOT:
Popliteal Artery Occlusion Presumably By Pressure from Organized Venous Clot (Neighbors and Green) 97

— W —

WOMEN:
Backache in Women, E 79
The Care of the Female in the Climacteric (Ross) 283
WORLD HEALTH ASSEMBLY:
World Health Assembly (Sellers) 309

— X —

X-RAYS:
See Roentgen Rays.

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI JANUARY, 1952 NUMBER 1

Editorials

Introducing MISS 1952

Even our friend McTavish had to admit that his wife Caermarthen needed a new dress ever so often, and beginning this month your JOURNAL will appear in a new frock for the first change in a long while. Cognizance was taken by the Editorial Board of the modern trends in magazine styling and format within conservative taste and a color selected for the cover that, it is hoped, will immediately attract more reader interest. For this we are indebted to the Art Staff of the Eli Lilly and Company.

Inside THE JOURNAL you will note many changes in type, styling, and design. The contents, editorial staff, postal requirements, publication rules, and other general information occupy a page well to the front. The old-fashioned masthead disappears entirely. The subject matter will be divided into five general sections, namely, Scientific and Special Articles, Editorials, Association, and General Interest. Type changes were made in the past year, with a very readable Times Roman now in use. The styling of the title pages should attract your interest and approval. Even the outside coat has been changed and comes to you in a neat white envelope.

Some wives have complained that they seldom see THE JOURNAL. Therefore, it is requested that it be referred to their attention.

The body and soul of this beautifully-gowned creature is within your own hands to make of her what you desire. Pretty jacket, neat type, modern format, and the latest styling mean little unless you supply it with material that will make THE JOURNAL a "must" on your reading list. Competition for your spare time is keen in these busy days and short nights, and your articles should be as brief and to the point as possible without sacrificing the context.

It is our belief that the members of the Association may be proud of their JOURNAL. Your cooperation, however, will be a requisite.

DIMENSIONS

To the snail's eye I am a god that passes
Over the shining temples of the grasses;
To the frail butterfly whose mission goes
From the blue lupine to the scarlet rose
I am a lesser god; and smaller even
To the white seagull riding the winds of heaven.
But soon I crumble from my godlike size
Watching a tall tree reaching for the skies,
Or where a wave leaps suddenly from the shore
Making a mountain of its speed and roar.
Then once again I am a man, my height
No taller than a snail's eye lost at night,
Searching as I for any kindred spark
To guide it through a tangled stretch of dark.

—DANIEL WHITEHEAD HICKY

Doctor Support Necessary to Outlaw

'MARRIAGE MILLS'

The Medical Association of Georgia firmly endorses efforts of the State Junior Chamber of Commerce and the Congress of Parents and Teachers in proposing immediate legislation to outlaw the flagrant "marriage mill" situation now thriving on the north and south borders of the state.

Although the blood test laboratory racket initially results in myriad social problems, these, in turn, eventually become health problems which affect the medical profession.

It behooves every Association member to contact his county representative at the earliest possible date urging support of the proposed legislation to amend Sections 53-205 and 53-208 of the Georgia Code.

Amendment to the former, by providing for an issuance period of five days for certain marriage licenses, will guarantee a three-day waiting period in every instance. In the latter case, by defining the liability of the ordinary for law violation relating to marriage licenses, provision for his punishment maybe assured for the time period violation pertaining to marriage licenses.

The existing situation at Kingsland and Folkston is graphically apparent to states adjoining Georgia. Both Florida and Tennessee trace their ever-mounting divorce rates on the "quickie" marriages, offered for a price, just over the Georgia line.

It is true that we, in originally passing the existing blood test law, were myopic not to foresee the loopholes afforded the blood test laboratory racket. And an opportunity is now presented to do something about it.

Georgia physicians must take the lead in supporting the proposed legislation.

THE A. M. A.

A Report on the Meeting of the House of Delegates

The business of condensing into capsule form any session of the AMA House of Delegates for the benefit of members not in attendance is a difficult, if not impossible project. And such is the case in regard to last month's Clinical Session at Los Angeles.

Furthermore, it should be pointed out that any member who may be interested in the foresaid proceedings in detail has at his disposal the December 22nd issue of *The Journal of the American Medical Association* which contains a complete official abstract.

AMA Delegates at Los Angeles were confronted with the usual mountainous supply of reports, resolutions and recommendations for consideration and action. However, for brevity's sake, editorial comment will perforce be limited to those highlights of general interest to members of this Association.

House action of significance included:

Adoption of the AMA Board of Trustees' recommendation that a new statement on the so-called "hospital practice of medicine" be substituted in place of the former *Hess Report.* (Refer to our January *PR News Letter* for specific details.)

A protest against the promulgation of any regulation by the Selective Service System under which chiropractors may be deferred.

An expression of confidence in the majority of American educators and bona fide educational organizations as opposed to an existing small but determined group advocating collectivism in the national education system.

A request for a comprehensive survey by AMA to determine the sources of funds, both public and private, now available for medical research.

An authorization to the AMA Board of Trustees to appoint a special committee to study and to come up with recommendations in regard to the problem of medical care for veterans with non-service-connected disabilities. (See *January PR News Letter* for additional comments.)

Adoption of a resolution authorizing the AMA to make a survey to determine the number of "deaths of small children and infants resulting from the ingestion

of household products not labeled as poisonous."

A scheduling of the 1952 Clinical Session in Denver; the 1953, in St. Louis, and the 1954, in Miami.

The selection of 84-year-old Dr. Albert C. Yoder of Goshen, Indiana, as General Practitioner of the Year.

The presentation of an additional $500,000 to the American Medical Education Foundation.

In a politically dramatic gesture, the House of Delegates held an open public meeting where Senators Taft and Byrd spoke on the existing dangers of "creeping socialism" and the overwhelming costliness of socialized medicine, both addresses broadcast and televised throughout the nation.

For those interested in such statistics, the 1951 AMA Clinical Session registered 4,419 physicians and 4,656 guests, including medical students, nurses and allied personnel; offered lectures and clinical demonstrations on more than 300 subjects; and displayed 90 scientifiic exhibits.

Medical Public Relations: 1952 STYLE

What does the public think of the doctor? What motivates the former's thinking? How does the physician view himself in the eyes of the public? Where inconsistencies exist in the two-fold relationship, what may the doctor do to reconcile such incompatibles between himself and the public?

Delving into such basic psychological considerations as these, the Fourth Annual Medical Public Relations Conference of the American Medical Association, held in Los Angeles last month immediately prior to the Annual Clinical Session, well deserved the presence of every member of The Medical Association of Georgia.

Where former AMA PR conferences perforce defined and projected the immediate role to be assumed by the American medical profession in toto for defeating compulsory health insurance legislation, the recent conference got down to the brass tacks of analyzing the individual physician's role in the community and its long-range effect on that segment of public opinion. And of utmost importance is such consideration when one realizes that public opinion reflected in one community, multiplied many thousands of times, will be decisive in the ultimate decision on medical care in the United States . . . whether it will remain voluntary or become government-supervised.

Probably the outstanding presentation of the two-day conference, myriad facets of which comprised the other talks on the program, was that of Ernest Dichter, Ph.D., of New York, practical psychological consultant to many of the nation's largest and most successful businesses and industries.

Dr. Dichter, early in 1950, was employed by the California Medical Association (at considerable expense) to undertake a psychological research study of doctor-patient relationship, using solely one county in that state as a laboratory. The study took many months to complete and the findings constitute probably the most valuable insight into medical public relations yet to be presented to the members of the profession.

The theme of Dr. Dichter's presentation was how the doctor-patient relationship may be improved, and it was his major contention that, to succeed in its public relations program, the medical profession must initially accept the fact that specific emotional and psychological factors today affect both doctors and patients which must be uncovered, recognized and replaced with altogether rational explanations, certainly before mutual understanding and appreciation may be attained.

In brief, here's how Dr. Dichter suggests that improvement in the doctor-patient relationship be accomplished:

1. Patients, as well as doctors, must be instructed in medical economics. (Why the cost of medical care is a good "investment," why modern medical care is expensive, etc.)
2. The patient's desire for continuity in his relationship with his doctor should be satisfied.
3. The mutual desire of both doctor and patient for appreciation or affection should be met.
4. The doctor should permit the patient to become an active and informed participant in the treatment rather than a passive recipient of care.
5. The public feeling of being kept at a distance by the medical profession should be removed.
6. The doctor should become an informed and leading participant in the life of the community.

The public relations program of the American Medical Association in 1952 and thereafter will be gauged to assist members in reaching these objectives.

A long-range program, to be sure. A slow one, admittedly. But the combined efforts of the individual doctor, the county medical society, the state association and, finally, the American Medical Association are bound to bring results.

Scientific Articles

H. H. BRADSHAW, M.D.
Winston-Salem, N. C.

Surgery in the OLDER *Patient*

There can be no doubt but that the professional handling of aged patients is a live-wire subject. Geriatric societies and journals have come into being, and interest is wide-spread. It therefore becomes mandatory for the surgeon to keep abreast of these developments.

I think that all intelligent surgeons have for years realized that the older patients did not withstand severe, prolonged insults, on the operating table and afterwards, as well as did younger patients. It has been difficult or impossible to ascertain just why that is true. Geriatric studies and evaluations are attempting to determine the causes for this difference in reaction on the part of the older patient, and we are learning that certain diseases are more or less limited to the older patients.

Surgical procedures upon patients in their 70's and 80's are commonplace. This is not because the actual span of man has changed in historical times. But rather because there are more people, and the horizons of surgery are being constantly lifted. If life tables for the United States are studied, it will be seen that very little difference exists, proportionally, in the number of persons of 80 or above living in the first part of the century, and the number at that age living at the present time.

The processes of aging are by no means uniformly progressive in all people and the criteria of the aging processes are not readily established. The old adage that we are as old as our cardiovascular systems is not entirely correct. The lungs, liver, and kidneys suffer wear and tear to such an extent that functional incompetency may be detected by even our crude methods of examination. Subtle changes in many viscera undoubtedly take place so there is a reduced functional reserve. During periods of stress and strain, typical of anesthesia and operation, the balance between function and non-function or impaired function may be completely upset. This balance is thought to be brought about by a complicated enzyme system which maintains normal physiological responses in man. Needless to say, we know very little about these systems as yet.

It is impossible to generalize on the problems which older patients present from the surgeon's point of view. The tissues which an individual inherits, the conditions which have surrounded him during life, and the diseases to which he may have been subjected vary greatly. With older patients, individualization is far more essential than with younger patients and children.

Every surgeon, who has been interested in the surgery of older patients, has come to recognize that, if proper precautions are taken, the risk to the older patient is not nearly so great as it is commonly believed to be, even for extensive operations. From collected data it appears that few, if any, necessary operative procedures should be refused an individual in this age group. They should not be permitted to die because they are thought to be too old to withstand surgery. However, many operations in the aged could have been obviated had correct judgment been used when they were younger and the proper treatment been urged at that time. Notable among such conditions are gallstones which have given trouble and duodenal or gastric ulcers which did not remain healed and continued to give symptoms.

Among the physiological changes that may take place with aging is a decrease in the circulating blood volume, loss of elasticity of blood vessels, pulmonary fibrosis and emphysema. Other less

Read before the Fifth District Medical Society meeting, Academy of Medicine, Atlanta, Nov. 15, 1951.

well understood but nevertheless definite changes occur as the slowly declining metabolic rate demonstrated on this slide. The saying that humans are twice infants, and only once men is clearly shown. I think one can interpret some of the difficulties with older patients in the light of this chart. The amount of preanesthetic drugs, the amount of anesthetic agent, the amount and rapidity of administration of postoperative fluids, should all be influenced by the metabolic rate.

The most common conditions in older patients in which operation is necessary are appendicitis, gallstones, prostatic disease, hernia with or without obstruction, cancer, uterine procidentia, amputations for gangrene, and fracture of the femoral neck. And certainly one of the commonest causes of death, excluding the primary disease, is a pulmonary complication such as embolism, pneumonitis, atelectasis, or edema.

In preparing patients for surgery, it is perhaps superfluous to state that they should be properly hydrated, and blood volume and protein reserves made adequate. This may require repeated blood transfusions. They should be encouraged to eat a well rounded diet supplemented with vitamins. If food intake is not adequate, supplementary formulae containing high protein and calorific value may be used. If necessary, the feedings may be given through an indwelling gastric tube. Often these individuals have no will to live and want to be left alone to die in peace. This condition may be the result of a poor nutritional status.

Fluids given intravenously must be given very slowly to avoid circulatory overloading. Most of us seem to have forgotten the subcutaneous route. It is much the safer of the two and should be used more in my opinion. Even fluids with some calorific value such as glucose and protein hydrolysates can be safely given by the subcutaneous route. My preference is to supply protein by whole blood or plasma transfusions, and fluid and electrolytes by the subcutaneous route.

Elderly people are quite susceptible to large amounts of salt. Perhaps the maximum daily salt intake for 24 hours should be about 5 Gm., unless there is need for replacing definite salt losses. Edema develops rapidly and unexpectedly sometimes. Unless the patient is definitely dehydrated, he rarely requires more than 1000 cc. of fluid per 24 hours. "We prefer to have them definitely on the dry side rather than the wet side."

Patients should not be allowed to remain in bed. They should be urged to go to the bathroom and to walk about the ward. If tests indicate impairment of certain organs as kidneys, liver, lungs or heart, therapy should be directed at the specific organ involved. Unless there is definite indication for digitalis therapy, I believe nothing is gained by preoperative digitalization. So-called tonic doses of digitalis have been out of vogue for many years. It has been our experience that patients with histories of previous coronary artery trouble can undergo anesthesia and surgery with very little added risk, provided the infarct is not recent. Also, patients wtih long standing valvular defects, if one excludes the aortic value, withstand surgical insults satisfactorily. Such statements as the above, imply that the anesthesia and surgery are conducted so there are no rapid changes in blood pressure, and no element of anoxia introduced.

In emergency operations on the aged, time must be taken to overcome dehydration and shock preoperatively. It is foolish and hazardous to undertake, for instance, any major surgery such as that for intestinal obstruction before dehydration and shock, if present, is corrected. If not, it can be expected that the patient will die on the operating table or shortly thereafter. Just as with emergency surgery in younger people, the mortality will be higher in other cases.

It is a mistake in any preoperative study of the aged to indulge in prolonged expensive maneuvers aided by many consultants—all of which alarms and confuses the individual and often permits him to come to the operating table in a more debilitated condition than when he was first admitted to the hospital. The decision as to the necessity for operation can usually be made quickly, even though the definitive diagnosis may not be evident. The necessary preoperative evaluations can be done without a waste of time, and it is for the best interests of the patient that they be so done.

Much has been written about preanesthetic medication and the type of anesthetic agent to be used in any given case. This problem seems to me to be somewhat less in the aged because they require less of everything as indicated by the metabolic chart. Also, they are usually self-disciplined and patient. They have less concern and fear. Most of their friends have had anesthetic and surgical experiences. Whatever may happen, becomes more acceptable to them. So from the anesthetist's viewpoint they make especially favorable subjects.

Many physicians have an inordinate fear of administering sedatives, especially morphine, to elderly people. Demerol, dilaudid or methadon are excellent substitutes. Some make the mistake of ordering routine adult doses without special consideration of the patients' debilitated condition. Practically we must depend upon a considered evaluation of a combination of factors such as age, size, occupation, activity—habitual and recent—hemoglobin, appetite, recent weight loss, pain, and the recent use of other sedatives—according to one's appraisal of these factors, one should administer somewhere between ¼ grain of morphine with 1/150 grain of hyoscine and one sixth of these amounts, that is, 1/24 grain of morphine with 1/900 grain of hyoscine. The hypodermic should be given 45 to 60 minutes before the induction of anesthesia.

There appears to be no reason to vary the dose preceding different types of anesthetics. No other drugs seem to be improvements over these mentioned.

Any anesthetic or method or combination of drugs and methods that are serviceable at all, are serviceable and good for old people. The main difference is that these patients are easily sedated, easily anesthetized and relaxed, and readily overdosed. What they require is conservatism, unceasing vigilance, and nicety and exactness of administration and control. I should like to put in a plug for intravenous pentothal sodium—it has proved itself a boon to old people. Complicated gas machines may be frightening, and a mask is more disquieting than the prick of a needle. It should not be used in cardiac decompensation and in operations requiring much relaxation. Spinal anesthesia is very useful in old people. It must be remembered that even though their vessels may be quite inelastic, they may have a profound fall in pressure. The arterioles may be quite elastic, and they determine the arterial tension. Old peoples' tissues, notably the heart muscle and brain are especially susceptible to damage by anoxia, and the risk of thrombosis attendant upon acute hypotension. And their small vessels are particularly susceptible to the strain of hypertension. Pressor drugs should not be given to hypertensives until the spinal needle is actually within the dura, and spinal fluid can be freely aspirated.

When an inhalation agent of any kind is to be given to an old person, his comfort is greatly increased if unconsciousness is induced with pentothal, followed by any other anesthetic selected. Time does not permit going into the advantages and disadvantages of each of the agents, but suffice it to say that in the old more than in any other patient the greatest anesthetic danger is anoxia. It is quite possible to do rather major operations, and in a manner satisfactory to both patient and surgeon, under nerve block or field block anesthesia. These methods should not be forgotten by surgeons.

The principal dangers during and after operation are hemorrhage, shock, liver failure, uremia, embolism and "so-called pneumonia". The first two are inherent in any major operation whether on the old or young and need no comment. Early rising and ambulation have received much deserved comment. In these older people it is especially valuable in maintaining a good circulatory and respiratory status. They should be turned frequently while they are in bed and encouraged to take ten or fifteen deep inspirations every hour. CO_2 inhalations are not as efficient in aerating all the alveoli as are voluntary deep inspirations. CO_2 may liquify secretions and help in their expulsion. Endobronchial suction may be necessary at times and should not be too long delayed. Pain should be relieved by small doses of morphine or demerol.

Gastric tubes used for suction should be removed as early as possible. The amount of mucous secretion is increased and may lead to atelectasis and subsequently pneumonitis. In addition, there is some danger of ulceration about the laryngeal cartilages and even lower down in the esophagus. The oral intake of food should be encouraged earlier than in younger patients because of the difficulties mentioned with intravenous fluids. Even with small losses of blood, an attempt should be made at exact replacement. Blood manufacture is slow; the vasomotor system and heart are less capable or readjustments. Every effort should be made to keep the parenteral salt intake at a minimum for fear of pulmonary edema, and its almost inevitable fatal outcome.

I have tried to point out the delicate balance between compensation and decompensation, if you will, in aged patients. I have stressed that they should be handled with "kid gloves" and have given some of the reasons. But after all, the fact that a patient has become an "aged" patient implies that he inherited a good deal of stamina. Who knows how old a man's calendar age is before he becomes old physiologically?

When all has been said and done, the most important factor in the surgical mortality of any period of life, is the nature of the disease process and the type of surgical procedure necessary to correct it.

PRESS COMMENT: *Two New Hospitals*

Georgia medical facilities continue to grow as two more health centers are completed and begin operations. Dedication services were recently held for the new Lamar County center at Barnesville, and for Chattooga County's new hospital at Summerville.

The Lamar County Maternity Shelter and Health Center was built at a cost of approximately $165,000, financed by local, state and federal funds under the Hill-Burton law. Equipment valued at over $10,000 was furnished for the new center by the Georgia Department of Health.

Chattooga County's new 36-bed hospital, built at a total cost of $300,000, will offer complete medical care for the people of the Summerville area.

Through the medical centers that are being completed in various sections of the state, a long-felt need for better medical facilities is being met.

Georgians may well be proud of these new hospitals. And they may be grateful for the community-minded groups and individuals that are making this progress possible.

ATLANTA JOURNAL.

VOCATIONAL REHABILITATION *of* CARDIAC *Patients*

JOSEPH C. MASSEE, M.D., Atlanta

In the December 1950 issue of *The Journal of the Medical Association of Georgia* attention was called to the vocational rehabilitation of heart patients and the number of persons involved in this problem. The procedures of diagnosis, functional classification, job analysis, and joy placement were stressed. A plea was made for the cooperation of all concerned—the patient, the family physician and the plant physician, or the employer in industry. Certain difficulties related to job transfer, the intangible nature of the disability, and the insurance implications were discussed. In addition job analyses and efficiency planning were offered to the self-employed or home workers.

The present paper is written to stress further the importance of this work and to report progress. With the increasing needs of the military for the physically fit, and the need for expanded production quotas of industry the importance of rehabilitation of handicapped persons for productive work is obvious. A handicapped person who becomes employed not only helps industrial production but he increases total national income and decreases the economic burden of public relief for the unemployed. In addition it has been shown that employment frequently is a most important part of treatment for disability both from the physical and psychic standpoint.

While it is obvious that no employer would employ a handicapped person just because of his disability, nevertheless it is hoped that with increased understanding of the problem no employer would refuse employment to handicapped workers who are properly diagnosed, trained, and placed in suitable jobs. Because of the usually invisible nature of their disability heart patients require special study and both employers and employees may require special instructions so that employment may be beneficial and profitable to both groups.

The committee on vocational rehabliitation of the Georgia chapter of the American Heart Association is concerned with the employment of heart patients. The members of the committee are representative of many segments of the economy. On the committee there is a doctor representative of the general practice of medicine and cardiology, a doctor member of the industrial health division of the state board of health, a director of the division of vocational rehabilitation, the secretary and the educational director of the Georgia Heart Association, a representative of large industrial employers, a lawyer, an insurance representative for industrial insurance companies, the secretary of the workmen's compensation board, and a representative of organized labor. It is hoped that such a meeting of minds will explore many of the problems incident to the industrial employment of cardiacs and find ways to extend the rehabilitation and employment of such handicapped persons in Georgia.

It is felt that the first emphasis must be put on the work of the doctors. They must first diagnose and give a functional classification to each case. There are modern improvements in the medical care of heart patients, such as cardiac surgery for congenital defects, improved treatment of endocarditis with antibioties and of rheumatic fever with cortisone and ACTH, reduction in the incidence of syphilis and improvement in its treatment, better management of coronary diseases with anticoagulants and of hypertensive disease with diet, medication, and surgery. The doctor will find more heart cases classifiable in an employable category. In many cases his directions to cardiac cases should include suggestions for vocational rehabilitation as well as medication and restriction of physical actitvity. This will apply both to the industrial worker or executive and to the self-employed or home worker. Again it must be emphasized that the doctor has a great responsibility for the correct reporting of cases of heart disease in workers who come under his care. Cooperation between the doctor, patient, and employer here is the foundation for the effective

Read before the Medical Association of Georgia in annual session, Augusta, April 20, 1951.

return of workers to safe and efficient employment.

Fortunately in Georgia every cardiac patient who is employable can obtain some special skill. The state division of vocational rehabilitation has facilities, through the employment of doctors, for the diagnosis and functional classification of any patient who is unable to pay for this. In addition their job analysis will find a suitable skill for each patient and furnish training for that skill. Finally in most cases suitable employment will be found after training is completed. The department can handle many more cases than are now being served. Doctors are urged to direct suitable cases to take advantage of these opportunities.

It is essential that doctors use a standard classification of heart disease in reporting cases of heart disease and in prognosing such cases. The standard nomenclature of the New York Heart Association is widely used and satisfactory in most cases. If the local doctor and the plant physician use the same terminology there will be little cause of confusion as to diagnosis. As for functional classification the judgment of the family doctor based on history and physical examination of the patient seems to be about as accurate as can be obtained by the use of more elaborate tests such as study of cardiac output. What the patient feels he can do without distress or without detectable signs of cardiac failure seems to be an accurate indication of his functional classification.

An encouraging report has been made recently of an experiment at the Altro Workshops concerning the rehabilitation of the cardiac. Though the group observed was small the observations indicate that ordinary occupation which does not entail more than usual exertion may not be detrimental to the health of the cardiac. On the contrary the relief from anxiety and the return of a more normal working existence including resumption of more normal social relationships and economic independence may be of benefit to the course of the heart disease.

In this connection the trend is toward permitting more work by patients who have survived cardiac infarctions. A study of more than 184 cases of cardiac infarction in the Eastman Kodak works shows that nearly 79 per cent of these people returned to work—some for substantial periods of time. When it is considered that many of these patients are among the most highly skilled employees as well as department heads and executive personnel of the company the importance of salvaging them for useful work is apparent to the company, to the employees and to their families. A higher percentage of the employees who did not have arterial hypertension were able to resume work and worked for longer periods of time than employees who did have arterial hypertension.

Pioneer work was done in the work classification of cardiacs in the Bellevue Work Classification Clinic founded in 1941. Two years ago the Cleveland Heart Society organized a work classification clinic which is making valuable contributions to our knowledge of the subject. On April 9, 1951 a meeting of the Joint Committee on Cardiac-in-Industry of the scientific council of the American Heart Association and Public Health Advisory Committee was held in New York. The agenda included the establishment of objectives for a cardiac-in-industry program and the consideration of possible fields of interest for committee concern. These included physician education; cardiac function tests; workmens compensation laws and other pertinent legislative needs; labor union policies, employment practices, rehabilitation programs, work classification units, and industry and union records of cardiacs at work. Development of national, state and local programs of activities were planned with reference to the assessment of the present situation, to community service, to research needs and to education. Georgia was represented on the committee by Dr. James V. Warren who reviewed the status of cardiac function tests.

Dr. Leonard J. Goldwater reviewed the contributions which have already been made to the industrial hygiene of cardiacs. These included a large number of articles in the literature, the work of work classification clinics and similar agencies in evaluating work capacity of cardiacs, statistical comparison of job performance, absenteeism, accident frequency, etc., between cardiacs and non-cardiacs, case findings surveys in industry, educational activities and experimental workshops. It was pointed out that contributions in the future can be made by greater utilization of health records in industrial medical departments, by studies of life expectancy of cardiacs who work compared with similar groups who do not work, by studies leading to the development of methods for determinating work tolerance, by studies of the emotional factors which contribute to disability in cardiacs, by studies of the criteria for awarding workmen's compensation for heart disease, and by further extension of some of the existing activities noted above. Research is important in all branches including the clinical, physiologic, psychiatric, statistical and legal phases of the problem.

The essentials for a well rounded program obviously should include research of the types just mentioned, and education of medical students, physicians, health and welfare workers, and the public, including both employers and employees. Service should be given to industry, to individuals and to voluntary and official agencies in solving specific problems of heart disease in relation to employment. Legislation is needed to remove the fear of increased financial liability on the part of employers of cardiacs. It must be stated that only a small beginning has been made in the attainment of these objectives.

In regard to legislation, a study of and possibly a revision of our industrial compensation laws seems necessary. In many cases where the law stated that heart disease is not compensable, civil suits are

brought against employers and damages awarded that are unfair. This does not encourage employers to aid in vocational rehabilitation of cardiac patients by hiring them. One suggestion that may help in this situation is to have heart cases classified as "second injury" cases. Here a fund established by the insurance companies from uncollected benefits may serve to care for cardiac cases and thus relieve the load on the employers. Likewise a revision of some aspects of union rules of seniority and retirement would promote a more cooperative and equitable management of cardiac cases in industry.

It should be re-emphasized that the large group of home workers and self-employed must be given the benefit of the research that is being done. Since these patients are not organized and have no representatives it necessarily becomes the function and responsibility of the family doctor to include plans for vocational rehabilitation in his medical management of these patients.

In conclusion, a plea is made to the doctors of Georgia to keep informed on the problems and progress in vocational rehabilitation of cardiac patients and maintain their place as the most important factor in this program.

BIBLIOGRAPHY

1. Massee, Joseph C., J. M. A. Georgia (Dec.) 1950.
2. Jezer, Abraham, New York Med. (Aug. 20) 1950.
3. Crain, Rufus B., and Missal, Morris E.: Arch. Indust. Hyg. 1:525-538 (May) 1950.

Surgery in the Treatment of CANCER *of the* MAXILLARY ANTRUM

SAMUEL A. WILKINS, JR., M.D., Emory University

The management of malignant disease of the paranasal sinuses has remained a fairly gloomy chapter in the treatment of cancer. Anatomically, these sinuses are of limited accessibility and in close proximity to vital structures. Since early symptoms are minimal and not strongly characteristic, diagnosis is not usually established until the disease is advanced and the opportunity for control or cure greatly diminished. Fortunately, cancer occurs primarily only rarely in the sphenoidal and frontal sinuses and but occasionally in the ethmoidal sinuses, in all of which early and adequate treatment is hardly possible. Cancer in the maxillary antrum comprises the major portion of the malignant disease of the paranasal sinuses and fortunately is most open to attack. It is this attack by surgery, supplemented by radiation, which I plan to discuss.

Incidence, Etiology, and Pathology

The incidence of cancer of the paranasal sinuses is low, about 0.2 per cent of all cancer in humans. In a clinic or hospital devoted entirely to the treatment of malignant disease the incidence has been reported as high as 2 per cent of all cancer seen. Nothing more specific can be said concerning the etiology than in regard to that of cancer in general. While the most common type of lesion histologically is squamous carcinoma, which supposedly arises from the pseudostratified columnar type of epithelium lining the sinuses, carcinoma may occur in a variety of forms including malignant papillomas and adenocarcinoma. Anaplastic carcinoma may be difficult to distinguish from sarcoma. Ohngren has thoroughly discussed the various tumors occurring in the maxillary antrum. Numerous tumors originating in the nasal passage and the alveolar ridge, as, e.g., adamantinoma, may invade the antrum.

Symptoms

It is probable that symptoms do not occur until pressure is developed within the sinus. As the tumor grows it erodes the thin bony shell, and in turn, produces pressure, erosion, and obstruction; infection ensues and aggravates the symptoms. There may be bleeding and a nasal discharge. Lesions extending into the hard palate and alveolar ridges often causes tooth ache. It is not at all un-

Read before the Medical Association of Georgia in annual session, Augusta, April 20, 1951.

From the Robert Winship Memorial Clinic, Department of Surgery, Emory University School of Medicine.



Fig. 1. Fungating tumor eroding the hard palate and alveolar ridge.

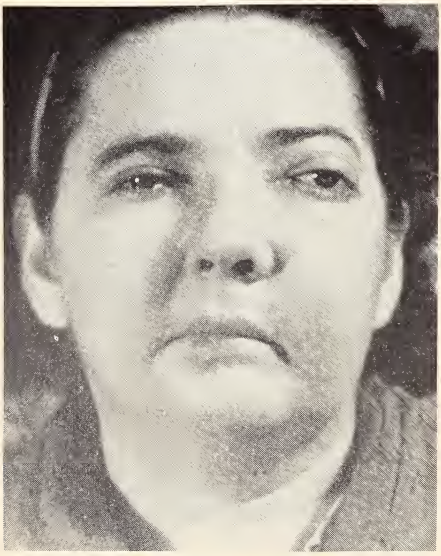


Fig. 2. Photograph showing gross deformity of the face. The tumor has eroded the floor of the orbit and is displacing the eyeball.

usual for a patient to have one or more teeth pulled without relief and then the dentist observe the tumor fungating out of a dental socket (Fig. 1). Extension may be through the lateral nasal wall, causing obstruction of the nasal cavity and secondary sinusitis. If the predominant growth is upward through the floor of the orbit, the eyeball may be displaced, vision impaired, or the lids forced together (Fig 2). Submucosal extension posteriorly along the lateral wall of the nasopharynx gives rise to few symptoms per se, while spread into the pterygopalatine fossa, upward towards the base of the skull, and laterally beneath the zygoma and towards the temporomandibular joint, causes considerable discomfort.

DIAGNOSIS

The diagnosis is usually to be strongly suspected from the history and physical examination and as a rule can be confirmed by biopsy. While films of the sinuses corroborate the diagnosis and give some indication of the extent of the process, one generally finds that the extension is greater than the films show. It is sometimes difficult to determine the point of origin of the process, whether it occurs primarily or secondarily in the antrum.

TREATMENT

Surgical treatment alone has met with little success because of the difficulty in determining the extent of the malignant process and encompassing it completely. Several factors have all mitigated against the use of surgery: Operative mortality, forthright disfigurement and the crippling of the individual by wide surgical excision, the morbidity of the wound, the difficulty of caring for the patient, and the very poor prognosis. External irradiation alone likewise has produced few cures because the therapist has no way of knowing the full limits of the disease and hesitates to give a cancer-lethal dose to a large mass of tissue. Adequate irradiation for cure usually produces such secondry symptoms as pansinusitis, radionecrosis with suppuration and sloughing, and panopthalmitis, resulting in a situation requiring surgery or one as morbid or more so than that produced by primary surgical treatment.

Combined methods of treatment have so far produced the highest reported cure rates, some as high as 30 to 40 per cent five-year cures.[3,4] Simple antrotomy, variously performed, has been used to provide an opening for the introduction of radium. New of the Mayo Clinic used a hot soldering iron forced directly through the hard palate into the antrum to destroy thermally the local disease and to provide space for heavily irradiating possible avenues of direct extension of the process. Obngren[3] came to prefer electrosurgery to remove the tumor or to provide access for intracavitary irradiation; he felt that there was less danger of causing spread of cancer cells with electrosurgery because of the coagulation of the tissue. Others have performed antrotomy variously limited or antrectomy and

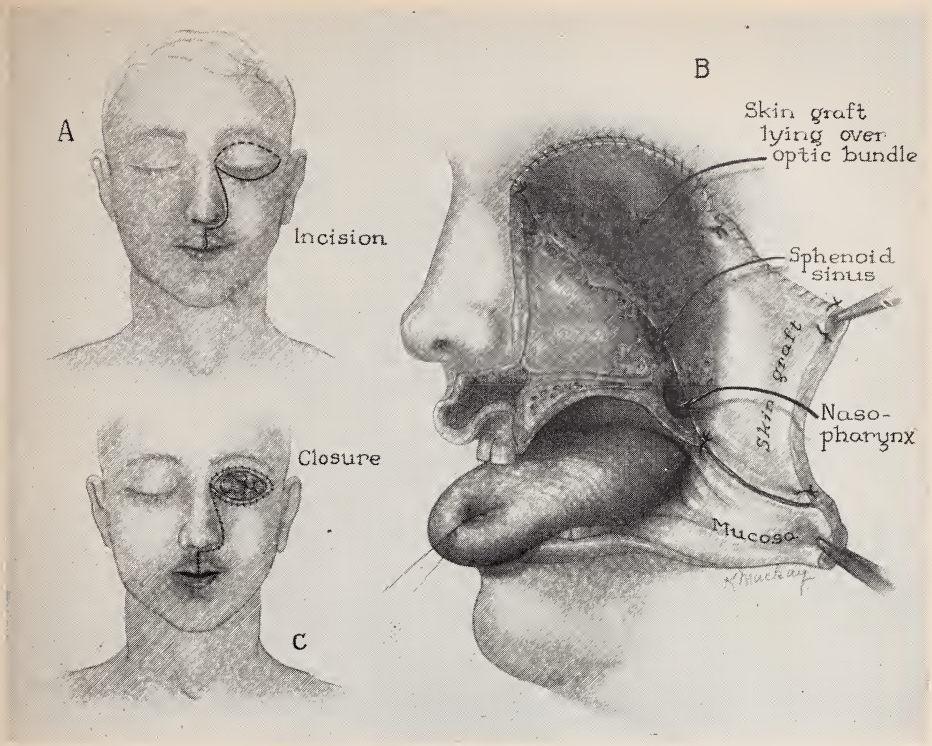


Fig. 3. A: Drawing indicating the Weber-Ferguson incision with a solid line and the extension for exenteration of the orbit with a dotted line. B: Drawing illustrating the operative defect with split thickness graft sutured in place before repair of the Weber-Ferguson incision. C: Drawing showing the cheek and lip flap sutured back in place over a stent of cornish wool and gauze.

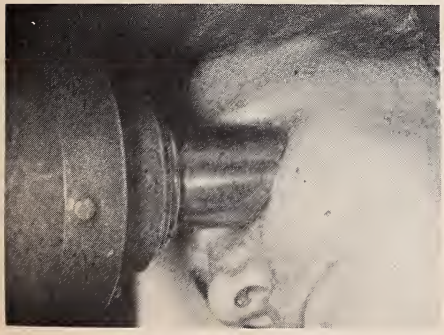


Fig. 4. Cone in place through the orbital defect for irradiation of residual disease. The cone may be introduced through the mouth or the x-ray beam may be directed through the skin.

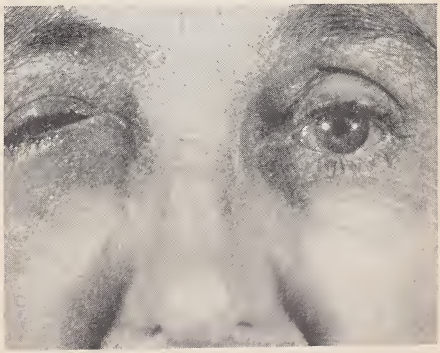


Fig. 5. Case No. 7-A: Photograph showing deformity from tumor. The eyelids are almost closed and the right nasal passage is obstructed.

TABLE 1

Early Results of Ten Cases of Wide Surgical Removal of Cancer of the Maxillary Antrum

Patient	*Sex*	*Pre-op Status*	*Diagnosis*	*Op-Date*	*Supplementary Treatment*	*Present Status*
1. O. T.	M.	Irradiated; Extensive.	Sq. Ca. skin of cheek Invading maxilla	9-28-49	X-ray and surgery	Free of disease after 18 months.
2. M. G.	F.	Untreated; Apparently Localized.	Sq. Ca. Left Antrum With Metastasis to the Neck.	10-12-49	Neck Dissection	Died of Disease.
3. W. A.	M.	Untreated; large local lesion.	Calcified Adamantinoma	10-14-49	None	Free of Disease after 18 months.
4. A. L.	M.	Untreated; Invading Orbit.	Sq. Ca. Left Antrum	10-14-49	None	Free of Disease after 18 months.
5. M. N.	F.	Previous Antrotomy Extensive.	Spindle Cell Sarcoma, Lt. Antrum.	10-21-49	X-ray and Surg.	Died of Disease.
6. A. S.	M.	Untreated; Very extensive Disease.	Sq. Ca. Right Antrum.	10-19-50	X-ray.	Recurrent Disease Controlled; Comfortable.
7. R. D.	F.	Untreated; Disease Invading Orbit.	Sq. Ca. Right Antrum.	11-17-50	None	Free of Disease; after 5 months.
8. G. P.	M.	Untreated; Invading Floor of Skull	Sq. Ca. Left Antrum	1-22-51	None	Free of Disease; after 2½ months.
9. M. F.	M.	Untreated; Very extensive Disease.	Anaplastic Sq. Ca. Left Antrum, Metastatic to Opposite Neck.	1-31-51	X-ray.	Disease Locally Controlled; Comfortable.
10. L. O.	M.	Untreated; Extensive Disease.	Sq. Ca. Left Antrum.	3-1-51	X-ray.	Comfortable; Local Disease Under Treat.

then used radium. In most instances radium has been used in such doses as to produce wide necrosis of tissue requiring careful and prolonged attention. After such treatments many months have usually passed before the wound was clean and a prosthesis could be worn; sometimes secondary operations have been indicated.

Surgical excision of the tumor-bearing area, even though it may be extensive, can be performed with an acceptably low mortality with the aid of improved anesthesia, antibiotics, blood, chemotherapy, advancements in pre- and postoperative care, and improved operative technic.

METHOD OF TREATMENT

In early cases it may be possible to encompass the lesion by antrectomy alone. After an intratracheal tube is introduced and the patient is anesthetized with pentothal[7], a Weber-Ferguson incision is made and the maxilla is skeletonized as the cheek flap is reflected (Fig 3). Disease which extends into the soft tissue of the cheek must be left attached to the maxilla with an adequate margin of grossly uninvolved tissue. After an incision has been outlined through the mucosa a chisel is used to divide the hard palate lateral to the midline and laterally through the posterior portion of the alveolar process. The apex of the maxilla is then chiseled free by division of the frontal process, which forms the lateral wall of the nasal cavity and a portion of the zygoma. The specimen should then be free for removal. If it appears that one is safely around the tumor, no more extensive procedure should be done.

While occasionally a limited operation is sufficient, usually the disease process has extended through the floor of the orbit, medially into the nasal cavity, posteriorly into the ptergygoid and masseter muscles, into the ethmoid and sphenoid sinuses, or posterolaterally beneath the zygoma. If the floor of the orbit is invaded, it must be sacrificed and consequently the orbit exenterated. After it has been

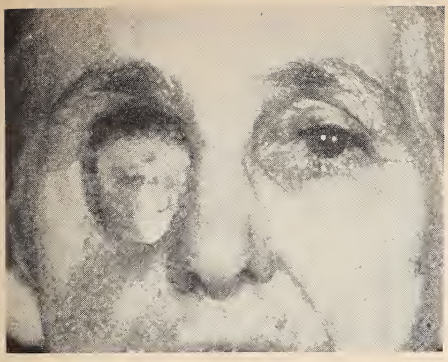


Fig. 5-B. Showing defect four months after operation.

decided to sacrifice the eye, the medial and lateral limits of the upper limb of the Weber-Ferguson incision are joined by an incision passing about a centimeter below the eyebrow and the entire orbital contents removed. The floor and the inferior portion of the medial wall of the orbit are removed with a chisel or rongeur. Then with rongeur and curet one attempts to remove all possible extension of the disease and curet away the lining of the ethmoid and spheriod sinuses. Bleeding is brisk but can be controlled by pressure, coagulation, and clamping. Preliminary bilateral external carotid ligations may minimize blood loss. A thin, split-thickness graft is finally placed against the wall of the wound, which is then packed with cornish wool, a waxy wool preparation, which retains its form indefinitely and does not absorb moisture. If the orbit has been exenterated, almost a full drum of the skin is used; the graft is sutured to the skin margins along the roof of the orbit and the superior border of the cheek flap. The Weber-Ferguson incision is then carefully closed. A catheter is introduced through the nose into the esophagus for feeding. The graft generally takes satisfactorily and greatly reduces morbidity of the wound. If one has not been able to remove all the disease, postoperative irradiation can be begun in about ten days. A cone can be introduced directly through the mouth or the orbital defect and directed at the site of the residual tumor (Fig. 4). Gold radon seeds are used to supplement external irradiation where proved residual disease exists. Intracavitary radium may be used; but after extensive surgery followed by direct x-ray therapy plus interstitial radon, the indications are greatly lessened. Within ten days after the operation, an impression may be taken for a temporary prosthesis to fill the defect in the palate. If the orbit has been exenterated the orbital defect is left open not only to serve as a window through which the wound may be cared for and observed but for the introduction of a cone for administering irradiation. Even the most radical procedure can be carried out with a very low mortality and a wound morbidity of a considerably less degree and shorter duration than ensues after intense radium therapy.

END RESULTS

There have been published no end results of cancer of the antrum treated by initial extensive surgery supplemented as indicated by irradiation. In fact, the method has not been employed adequately long for full evaluation. Preliminary examination of the data at the Memorial Hospital in New York has shown a five-year cure rate of about 13 per cent[8]. In comparing this figure with published results by other methods, one must as always determine if the statistics are comparable. The author's personal experience with this procedure in ten cases, seven of which were for primary squamous carcinoma of the antrum, is shown in Table I. This procedure has been performed ten times without selection of cases in regard to general physical condition and age. In all except three cases, the orbital contents have been exenterated. There has been no mortality and no serious wound morbidity.

Three patients (cases no. 4, 7, 8,) with primary cancer in the antrum extending into the orbit are free of disease after eighteen, five, and two and a half months following treatment by surgery alone (Fig 5). One patient (case no. 3), of adamantinoma invading the antrum, is free of disease eighteen months following only surgical treatment.

Two patients are dead, (no. 2, 5). One patient (no. 2) had metastatic disease in the neck discovered in the process of ligation of the external carotid artery at the time of operation. One patient (no. 5) had a highly malignant spindle cell sarcoma which recurred promptly.

Four patients (cases no. 1, 6, 9, 10) have received external and interstitial irradiation to residual disease, which is controlled or under treatment after eighteen, six, three, and two months. One patient (case no. 9) was found to have a positive node in the opposite side of the neck when



Fig. 5-C. Dental Prosthesis.

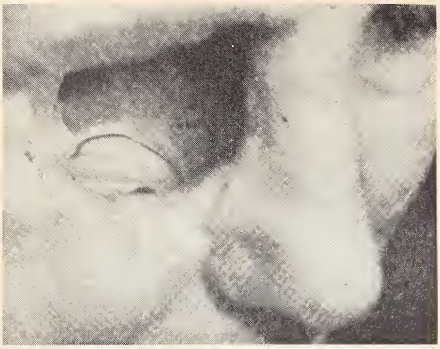


Fig. 5-D. View through orbital defect showing prosthesis in place.

the external carotid artery was ligated. The prognosis in this instance is practically hopeless.

It is, of course, far too soon to draw significant conclusions from these data. They do, however, suggest that to date the methods of treatment used give promise of providing more satisfaction in managing these patients.

CONCLUSIONS

1. Wide surgical removal of the maxillary antrum can be accomplished with an acceptably low mortality and minimal wound morbidity.

2. Wide surgical removal of cancer of the maxillary antrum, without irradiation, offers a fair chance of cure; supplementary irradiation when indicated considerably enhances the chance of cure and is valuable for palliation.

3. It is believed that the end results, both curative and palliative, of this method of treatment will equal or better those from intensive intracavitary irradiation.

BIBLIOGRAPHY

1. Johnson, Frederick M.: Radium Treatment of Carcinoma of the Antrum, Surg., Gynec., & Obst., 819-822 (June) 1924.
2. Quick, D.: Treatment of Malignant Growths of the Nasal Accessory Sinuses and Nasopharynx, Radiology 14:191-196, 1930.
3. Ohngren, L. G.: Malignant Tumors of the Maxillo-Ethmoidal Region: Clinical Study with Special Reference to Treatment with Electrosurgery and Irradiation. Acta Otolaryng., Supplement 19, 1933.
4. New, G. B., and Cabot, C. M:: Epithelioma: Curability of Malignant Tumors of Upper Jaws and Antrum, Surg., Gynec, & Obst., 60:971-977, 1935.
5. Ewing, James: Neoplastic Diseases, Philadelphia, W. B. Saunders Company, 1941.
6. Windeyer, B. W.: Malignant Tumors of the Upper Jaw, Brit. J. Radiol. 16:362-366.
7. Schweizer, O.: Pentothal Sodium Anesthesia for Operations about the Head and Neck, Experience with 1004 cases, Cancer 2:223-244, 1949.
8. Martin, Hayes: Cancer of the Head and Neck, New York, American Cancer Society, Inc., 1949.
9. Collins, V. P., and Pool, J. L.: Treatment of Antral Cancer by Combined Surgery and Radium Therapy, Radiology 55:41-44, 1950.

WILLIAM L. DOBES, M.D., Atlanta

SPOROTRICHOSIS *in Georgia*

It should be noted that sporotrichosis does occasionally appear in Georgia, although perhaps not as often as in other parts of the United States. The wide distribution of the cases reported, the occurrence of atypical cases and the fact that the infection is frequently confused with other diseases, suggests that many of these cases may be overlooked.

Only one case of sporotrichosis occurred in Georgia has been reported. This report records six additional cases. A questionnaire was mailed out to other dermatologists in Georgia, with an inquiry as to how many cases had been seen by them in the past ten years. Ten responded. The number of patients and their residences were as follows:

Atlanta (inclusive of cases reported)	24
Columbus	1
Albany	1
Augusta (in past 2 years)	3
Macon	4
Savannah	6
Rome	1

This makes a total of forty cases in ten years in Georgia seen by eleven dermatologists.

Sporotrichosis presumably is a chance infection, known to be caused by the fungus, Sporotrichum schenckii. It is believed that man usually acquires the disease following an injury, plus contact with contaminated plants, infected animals or animals acting as carriers.

The primary lesion develops at the portal of entry. This usually appears as a pustule, becomes indurated and forms an abscess or indolent ulcer ("chancre"). Later a lymphangitis appears with



Fig. 1. The sporotrichon chancre is seen on the thumb typical nodules along the lymphatic drainage of hand and wrist are present (*Case* 2).

nodulations occurring along the lymphatic chain. The nodules become ulcerated. Constitutional symptoms are rare in the lymphatic type of sporotrichosis.

The clinical diagnosis as a rule is easily confirmed by culture of the purulent material obtained from the ulcerations or nodules on Sabouraud's medium.

REPORT OF CASES

Case 1. R. S., male, aged 12. The history revealed that he had fallen off his bicycle and had bruised himself three weeks previously. A week later a nodule developed on the dorsum of the right hand. A few days later nodules developed along the lymphatics in his forearm. When first seen the "chancre" had a granulomatous appearance with ulceration. A positive culture of Sporotrichum schenckii was obtained. This patient was given increasing doses of iodides orally and healing occurred uneventfully in five weeks.

Case 2. R. L. T., male, aged 33. This patient was a mechanic by occupation and injured his hand while working on a car. When seen on Aug. 10, 1946 an indurated granulomatous nodule was present on the dorsum of the left thumb and numerous cystic nodules had developed along the lymphatics of the forearm. A culture on Sabouraud's medium revealed Sporotrichum schenckii. The patient responded readily to the oral administration of iodides and a cure was obtained in seven weeks.

Case 3. P. P. D., male, aged 60. A farmer and carpenter by occupation. He gave a history of having cut his right index finger on a new stove pipe which had been covered with graphite. The lesion healed but a new ulcer developed at the point of injury three weeks later. A physician had given him penicillin injections and varied forms of local treatment without success. Nodules then developed along the lymphatics of his right forearm and had been present for two months when seen on Dec. 9, 1949. A positive culture of Sporotrichum schenckii was obtained and the patient was given saturated solution of potassium iodide but he could tolerate only 20 drops three times a day. Fractional doses of roentgen rays were given locally at weekly intervals and a cure was achieved in seven weeks.

Case 4. L. L. E., female, aged 39. On April 25, 1949 a slightly elevated scaly plaque about the size of a dime was present on the right wrist. The patient stated that this plaque had been present for six months. Two weeks after examination the lesion developed into a purulent, punched out ulceration and appeared to be pyoderma. Ammoniated mercury ointment was prescribed. On May 18 the patient returned with three small tender nodules present on the right forearm. A clinical diagnosis of sporotrichosis was made and proven by subsequent culture of Sporotrichum schenckii. The patient was given potassium iodide orally and healing was complete within two months.

Case 5. J. B. D., white male, aged 37, seen in August 1941. On the lateral surface of his left wrist a small ulcer was present with some peripheral edema. There was no history of injury. The ulcer measured 2x2.5 cm. The base of the ulcer was so infiltrated that an epithelioma was suspected. Antiseptic ointments were prescribed for local use. On Sept. 6, 1946 the lesion was again examined. The ulcer had a clean granular base, the borders were infiltrated, slightly inflamed and undermined. A neoplasm was still suspected. On October 14 the ulcer had increased in size but appeared softer. No other lesions were present. A biopsy was made and the report of this was consistent with a diagnosis of sporotrichosis. A culture was taken and a Sporotrichum schenckii grew readily. The patient was not seen again until a month later. At this time there were noted three nodules in addition to the ulcer. On November 14, the patient was requested to take orally saturated solution of potassium iodide, one teaspoonful three times a day. A week later this dosage was increased to four teaspoonsfuls daily. Within three weeks the ulcer had healed and the nodules had disappeared.

Case 6. P. A. B., white male, aged 40 years was seen in June of 1941. According to his history in 1925 he developed a small indurated plaque over the right knee. Later the plaque became ulcerated and drained. Various home and drug store remedies had been applied locally and others taken internally. New lesions below and above the knee appeared. Some would heal and leave scars, others would seem to persist. The new lesions would appear as small plaques or deep seated nodules. These would persist for several days or weeks and then become ulcerated. Some of the ulcers formed draining sinuses. These sinuses would not heal as readily as more superficial ulcerations.

In 1938 this patient was first seen at the Grady Memorial Hospital dermatological clinics. At this time several nodules

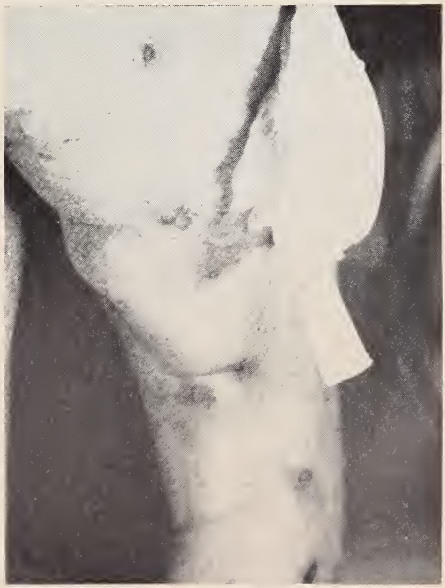


Fig. 2. Draining sinuses along lymphatics of the leg and thigh. Sporotrichosis of long duration (*case 5*).

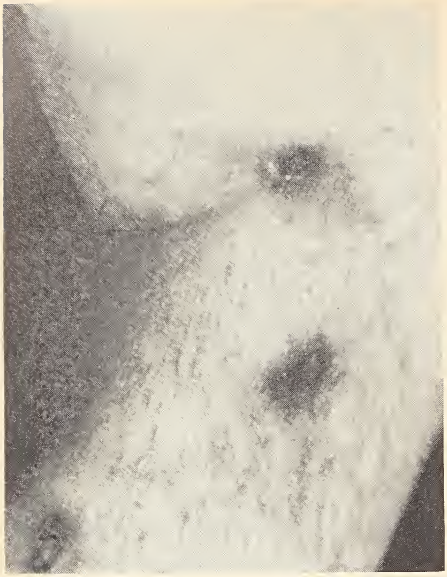


Fig. 3. Close-up of draining sinuses which had a granulomatous appearance (*case 6*).

and draining sinuses were present. They extended from the ankle to the knee on the right leg along the lymphatic drainage. A clinical diagnosis of sporotrichosis was made and the patient was given saturated solution of potassium iodide ten drops three times a day. The dosage was to be increased gradually to tolerance. Unfortunately, the patient returned to the clinic irregularly and took the iodides only spasmodically and in small doses.

In September 1941 the lesions were for the most part draining sinuses and abscesses, well defined, red and deeply indurated. There was some contraction of the knee joints causing the patient to walk with a limp. A roentgenogram of the femur revealed periosteal thickening along the posterior aspect. No destructive bone changes were evident. Repeated cultures were negative at this time for fungi, but staphylococcus aureus was grown on several occasions. Other physical and laboratory findings were normal, including a urinalysis, Kahn, serologic test, sputum and feces examination, nonprotein nitrogen, sedimentation rate and a search for acid-fast bacilli and other foci of infection revealed nothing significant.

A biopsy was made and the histologic findings were those commonly seen in sporotrichosis.

This patient was again instructed as to proper treatment, but continued to return to the clinic at irregular intervals and to take iodides irregularly. Repeated fungus cultures were negative. Deep roentgen therapy in 1943 did not help clinically. Iodide therapy was discontinued for three months. Numerous cultures were taken from the deeper aspects of the sinuses and consequently four separate positive cultures of Sporotrichum schenckii were grown. A sporotrichin test was positive. This patient refused further treatment and did not return for observation.

COMMENTS

It is known that the causative organism of sporotrichosis is commonly found on plants. The disease occurs much more commonly in animals than in man. It is believed that man acquires sporotrichosis from contact with plants, infected animals, or animals acting as carriers. A break in the skin is thought to be necessary as a portal of entry. It was interesting that none of these patients gave a history of exposure to plants prior to infection. Four did give a history of trauma preceeding the development of the chancre. Case 1 bruised himself while riding a bicycle. Case 2 was injured while handling greasy automobile parts and Case 3 injured his hand on a stove pipe. Case 4 damaged her hand while handling excelsior in packaging. Case 5 and 6 could not recall any injury preceeding their infection.

Case 5 presents the diagnostic diffiiculties noted in some cases. Approximately three months elapsed before lymphatic spread developed from the primary "chancre". When only the chancre is present it is conceivable that even the more experienced dermatologist may fail to make an early diagnosis. A biopsy at this stage may be of considerable value. A culture for fungi may not be thought of at this early stage, because the disease is rare and the chancre itself is not always typical of the disease.

It is of interest that the biopsies in case 6 suggested the clinical diagnosis of sporotrichosis. The positive growth of Sporotrichum schenckii however, was not obtained until after many weeks of repeated culturing. Sporotrichum schenckii is difficult to find on direct smears, but cultures as a rule are easily obtained and the fungus grows readily. The reason for the difficulty in case No. 6 may be explained by the fact that the patient took small insufficient doses of iodides at irregular periods. It is known that the best results in treating sporotrichosis are obtained when the dosage of the potassium iodide is rapidly increased to tolerance. Insufficient dosage may cause the fungus to develop a drug resistance to iodides so that the disease will respond poorly. The organism also may become attenuated and fail to grow as easily as one would expect. Thus in Case No. 6 even after three months of complete rest from iodides it was only with prolonged trial that a positive culture was obtained.

SUMMARY

1. Forty cases of sporotrichosis have been seen by twelve Georgia dermatologists in the past ten years.
2. Six cases seen by the writer are reported.
3. Some unusual observations are described.

ADDENDUM: Since this paper was written an additional case of sporotrichosis was seen. The most unusual location is the left breast.

REFERENCES

Garrison, D. H.: Sporotrichosis, J. M. A. Georgia, 36:80-81, 1947.

514 Doctors Bldg., Atlanta.

EOSINOPHILIC GRANULOMA *of Rib*

SANDY B. CARTER, M.D., Atlanta

Eosinophilic granuloma was first reported and described in 1929, but it was not until 1940 that the lesion was clearly defined as a clinical entity and given the name eosinophilic granuloma of bone. Since then there has been an increased awareness of the condition and a fair number of cases reported. Even so, the lesion is so interesting and provocative when discovered that it should be brought to the attention of the profession from time to time.

The case to be reported is rather typical of the clinical description given in previous reports. However, it is of interest for at least two reasons. First, there was a prominent "red herring" that dominated the picture until eliminated. Secondly, the patient was neither of the sex nor of the age in which the great majority of cases fall. Therefore, it is felt that there is adequate reason for submitting another report of this condition, which has been fully described previously.

CASE REPORT

The patient was a 42 year old housewife, first seen in the office May 31, 1951. She stated that she had been well until mid March 1951 when she had an upper respiratory infection. Early in April 1951 she noted pain in the mid portion of the left chest anterolaterally. There was no fever. She received two injections of penicillin and felt better. Severe pain in the same area returned April 15. She was put to bed for four weeks and given 14 injections of penicillin. During this time she had low grade fever and the left chest pain persisted. On May 10 a chest x-ray was made, and she was told that she had pleurisy and had had pneumonitis. When she was seen May 31 she still complained of afternoon fever and aching in the left chest in the same area.

Complete physical examination was negative except for the following findings. In the left lobe of the thyroid there was a firm nodule, slightly over 1 cm. in diameter. Pressure over the fifth left rib in the mid axillary area produced pain. There was no definite mass noted.

Chest x-ray revealed an osteolytic lesion involving the anterolateral portion of the left fifth rib. She was advised to enter the hospital and was admitted June 10.

Laboratory findings were not remarkable. Kahn negative. RBC 4,500,000. Hemoglobin 15 Gm. WBC 9950. Segmenters 70 per cent. Eosinophiles 1 per cent. Lymphocytes 20 per cent. Monocytes 9 per cent. Urine negative. Serum calcium 11.4 mg. per cent.

X-rays of the skull, pelvis and adjacent portions of the femurs and lower lumbar vertebrae were negative. Films of the chest including spot films of the left fifth rib were reported as follows: The films revealed a destructive process in the anterolateral portion of the left fifth rib. There is no active regeneration seen. There is an associated soft tissue mass adjacent to the lesion. Left lung normal. Right lung, heart, great vessels, mediastinum, and diaphragms have normal appearance. There is osteophytosis of the dorsal vertebrae. Opinion: Destructive lesion in the left fifth rib, type indeterminate. The type of destruction seen in the rib, and the presence of an associated soft tissue mass, is in favor of a malignant process. It could be primary or secondary.



Fig. 1. PA view.

The concensus of opinion was that the patient might have carcinoma of the thyroid with metastasis to the rib. So it was decided to do a left lobectomy of the thyroid, which was done June 16. At the same time a needle aspiration was made in the rib. The pathologic report revealed adenoma of the thyroid. No tissue was identified in the aspiration material.



Fig. 2. Left lateral view.

On June 23 the segment of the left fifth rib containing the lesion was removed. At operation the lesion was described as having the appearance of an old chronic infection. The histologic report was eosinophilic granuloma of bone.

The patient was discharged June 28. Follow-up one month later revealed her to be free of complaints and in good health.

COMMENT AND DISCUSSION

A review of the literature reveals considerable discussion as to whether eosinophilic granuloma of bone is a specific entity or an acute variant of such chronic conditions as nonlipoid histiocytosis and lipogranulomatosis, which respectively are known as Letterer-Siwe disease and Hand-Schuller-Christian disease. The concensus of opinion seems to be that these are all variants of the same disease entity.

Eosinophilic granuloma is an osteolytic reaction of flat bones mostly, but it may involve long bones. There are no reported cases of involvement of the hands or feet. The osseous lesions are usually solitary, but multiple lesions are not uncommon. The great majority of lesions are confined to bone. However, there have been a few instances of extra osseous eosinophilic granuloma. The lesions occur most commonly in the cranial vault, ribs, vertebrae, and long bones.

Although numerous lesions may be present only one may produce symptoms and signs, the most prominent of which are local pain and tenderness and perhaps a palpable mass. In some cases there are non-specific systemic symptoms and there may be a moderate leukocytosis with an eosinophile county up to 11 per cent. It is more common for eosinophilic granuloma to be silent and to be found on routine x-ray studies.

Eosinophilic granuloma most often affects children and young adults, and is found more frequently in males than females. It is said to be extremely rare after 25 years of age.

The findings, especially roentgenologic, simulate a variety of neoplastic and inflammatory conditions. The x-ray appearance of an individual lesion has been described (1) as a small or large irregularly destructive radiolucent zone with or without signs of periosteal reaction, bone condensation, or pathologic fracture. In ribs, the affected area in addition to rib destruction may show expansion of the cortex and if perforation or fracture has occurred, deposition of periosteal new bone and thickening of overlying soft tissue. There is nothing distinctive about the roentgenologic description.

Laboratory studies are also no aid in diagnosis. Calcium, phosphorous, alkaline phosphatase, and cholesterol are normal. The picture is farther confused when it is recalled that ribs are involved by metastases more frequently than primary growths.

Diagnosis, therefore, necessitates surgical exploration and histopathologic study. Complete spontaneous healing by resolution may occur in some cases in 6 or 7 months. The lesions may be treated by curettage or roentgen therapy, but since exploratory biopsy is essential for diagnosis, wide surgical excission is recommended as the treatment of choice in eosinophilic granuloma of the rib.

The preceding discussion suggests several interesting features about the present case. First, the solitary nodule in the left lobe of the thyroid and the oteolytic rib lesion presented a definite "red herring". One of the common primary sources of of osseous metastases is the thyroid, and it has been noted that ribs are involved more frequently by metastases than by primary growths. The histologic report of adenoma eliminated this possibility. Secondly, the patient was a female and 42 years of age. Neither of these is typical nor usual. There have been very few cases reported at this age. This may be the oldest woman in whom eosinophilic granuloma has been reported.

CONCLUSIONS

A case of solitary eosinophilic granuloma of the rib has been reported. A single nodule in the left lobe of the thyroid suggested strongly the possibility of malignancy with metastasis to the rib. The patient was a 42 year old woman, which may be the oldest case reported in a woman.

REFERENCES

1. Maurer, E., and De Staffano, G. A.: Eosinophilic Granuloma of Rib, J. Thor. Surg. 17:350-356, 1948.

2. Dundon, C. C; Williams. H. A., and Laipply, T. C.: Eosinophilic Granuloma of Bone, Radiology 47:433-444, 1946.

ENOCH CALLAWAY, M.D.

Biopsy of BREAST

Many women object to having biopsies done on their breast because they fear the disfigurement of scars which may be left from the removal of lesions which prove to be benign. This fear can be removed by assuring the patient that these biopsies can be done without leaving an unsightly scar which will be seen when they wear evening clothes or bathing suits. Most lesions in the breast which do not demand a complete mastectomy can be approached and removed for microscopic examination by one of the methods illustrated in this article. These methods are absolutely devoid of unsightly scarring or unnecessary mutilation.

By carrying an incision around slightly more than half the circumference of the breast down to the facia by blunt dissection, the entire breast may be elevated and cyst or nodules removed, approaching them from the back of the breast (Fig. 1).

Where the lesions are small and are located close to the periphery of the lower or outer borders of the breast, similar incisions, but much shorter, can be used to approach and remove these lesions (Fig. 2).

Where there is a bleeding from the nipple due

Fig. 1. Incision to expose lesions on the posterior wall of the breast.

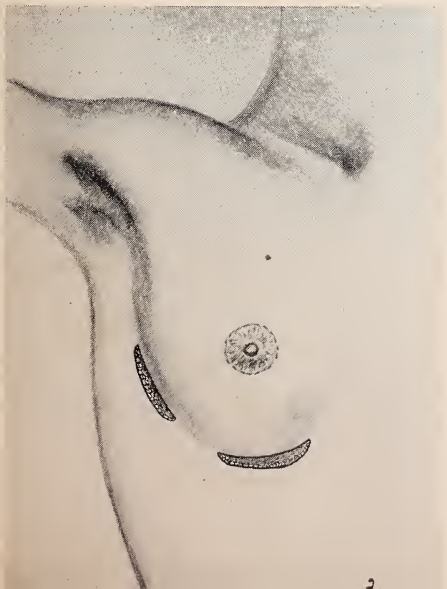


Fig. 2. Incisions to expose small lesions near perphery of breast.



to small intraductal papillomas, the actual lesion cannot be felt by the examiner and some method to locate this lesion must be used.

By inserting the eye end of a large cambric needle into the bleeding duct as far as possible and then by making an incision at the areola line, the duct may be grasped wtih the needle in a forceps and severed. Whereupon, after a little dissection, the other end of the needle may be pulled through the nipple. Using the needle as a guide and dissecting along the duct, the dilated area in the duct and the papilloma may be discovered with only a moderate amount of difficulty and removed (Fig. 3).

In lesions located in the upper and inner quadrants of the breast, an incision around slightly more than a third of the areola line down to the breast tissue can be made. Then, with scissors the overlaying tissue can be deflected away from the breast, and by retracting the skin and gradually pulling up on the breast tissue with Allis clamps, the lesion can be brought into the incision and removed.



Fig. 3. Method of inserting needle into nipple to locate small intraductal lesions.

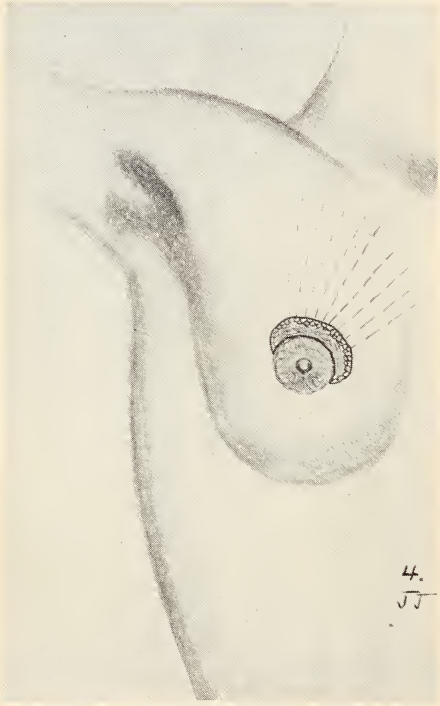


Fig. 4. Method of locating lesions in upper and inner quadrants using scissor dissection.

It is even possible to sever the duct and breast tissue just under the incision down to the fascia and by gradual dissection, to remove one fourth of the breast tissue subcutaneously. The edges of the remaining breast tissue should be caught constantly with Allis clamps, and all bleeding points clamped and immediately ligated. After removal of the quadrant, starting at the outer edge, the breast may be easily sutured together with interrupted catgut sutures. If there has been sufficient dissection of the skin, there will be very little wrinkling; and, after healing, practically no deformity of the breast (Fig. 4).

Conclusion

Assuring your patient that unnecessary scarring and mutilation will not be caused by removing small nodules or cysts, or even by the removal of an entire quadrant of the breast will make them much more willing to have the proper procedures carried out.

CIVIL DEFENSE:

The NATIONAL *Medical Conference*

and

The GEORGIA *Health Service Plan*

EDGAR M. DUNSTAN, M.D., Atlanta, *Chairman*
Medical Civilian Preparedness Committee, Medical Association of Georgia

The American Medical Association, the American Hospital Association, and the Association of State and Territorial Health Officers sponsored a Medical Civil Defense Conference at Chicago on Nov. 9 and 10, 1951.

Registration for the Conference exceeded 250, representing participants from every state, the District of Columbia, Hawaii, Nova Scotia, and Canada. Dr. L. M. Petrie, Deputy Director of the Georgia Civil Defense Health Services Division, represented the Georgia Department of Public Health and I represented the Medical Association of Georgia. The primary purpose of the conference was the unification and acceleration of local medical civil defense planning.

Outstanding speakers included, among others, Mr. Millard F. Caldwell, the Federal Civil Defense Administrator, Dr. Herman E. Hilleboe, Mr. Anthony Eckert, Dr. Justin J. Stein, Dr. William L. Wilson, Dr. Dwayne D. Orton, Dr. James C. Sargent, and Dr. Ozro T. Woods. These brought the conference up to date on civil defense planning in the health services field throughout the nation. In the discussion groups ample opportunity was given to study the main problems involved and to compare notes as to how different states are solving these problems. The staff of the Federal Civil Defense Administration was also available throughout the conference for informal discussions.

The detailed proceedings of the conference will be available soon to those directly concerned in the planning work. Further, many of these points will be discussed at the next session of the Medical Association of Georgia.

Some of the basic health problems are: (1) The number of casualties which will occur simultaneously, estimated at 60,000 for one atomic explosion at 2000 feet; (2) the necessity for constant readiness to take care of these casualties without wrecking the over-burdened economy; (3) The limitation of funds which will undoubtedly continue and thus lead to the necessity for maximum improvisation; (4) The large number of casualties expected among professional and technical personnel with the consequent necessity of having vast numbers of lay people trained in self-help and neighbor-help and to assist this limited personnel and thus multiply their effectiveness; (5) The strong possibility of failure of power and other utilities, forcing reliance on one- or two-story buildings for improvised hospitals with large rooms to facilitate nursing care; (6) The problem of decentralizing operations; (7) The need for uniform statewide planning to facilitate mutual aid and evacuation—non-target areas particularly should be made aware of this; (8) The necessity of combatting public apathy, which is probably based largely on fear and confusion due to the size of the task ahead and the lack of previous experience on which to rely; and, (9) The tendency of the population to panic under these conditions and thus the urgent necessity of correcting misinformation and training for the duties each will be expected to perform.

It was brought out at the conference that recent public polls in Michigan and Florida had shown that 85 per cent of those polled stated unequivocally that civil defense training was necessary for survival and that it was destined to remain so indefinitely. It would thus appear that a good part of the trouble lies in the fact that civil defense health leaders have not taken sufficient time to outline plans for the training of the general public upon which success so largely depends, since here lies the bulk of the assistance which will be required. Some states have

Civilian Preparedness Committee of the MAG

progressed in their overall planning more than others and Georgia stands well in this regard. In all states, however, the professional and technical aspects of civil defense training have advanced much faster than the training of the general public.

UNIFORM STATEWIDE PLAN FOR CIVIL DEFENSE HEALTH SERVICES RECOMMENDED FOR GEORGIA

General:

1. Functional organization at all levels should follow those recommended in Publication AG-11-1, *Health Services and Special Weapons Defense,* prepared by the Federal Civil Defense Administration. The health officer, where there is one, should be the director of the health services, and a practicing physician should be an assistant director in charge of the medical services. There should be an advisory committee composed of representatives of the medical, dental and other allied professional and technical groups directly concerned. In order to facilitate mutual aid and training, the recommended plan is uniform for target as well as non-target areas since the latter will provide evacuation facilities and other vital support.

2. The five district health officers and their civil defense staffs, with headquarters in Rome, Athens, Macon, Waycross and Albany, will act as alternates of the State Civil Defense Health Services Division staff and thus provide for the necessary decentralization. The dsitrict staffs will be responsible for the operation of the State Plan in their respective districts.

3. Training manuals giving detailed instructions about the different phases of the plan are to be made available as needed. Pictorial exhibits will be available for rapid and wide dissemination of information. Radio and television will be utilized extensively, and so will newspapers and magazines.

4. The plan comprises two major phases—the "self-help and neighbor-help" phase and the "professional and technical assistance" phase.

Self-Help and Neighbor-Help:

1. The schools throughout the state* are to be used as improvised hospitals with the personnel of each school district organized by its respective parent-teacher association with the assistance of the school staff, all of whom should be trained, as soon as possible, for these new duties. A map of the school and its surrounding area is to be posted prominently in the school to show proposed utilization of floor space for casualty treatment, locations of reserve supplies in neighboring homes, and other essential information.

2. The parent-teacher associations are to catalog the skills available in their districts and use them to the best advantage. They should have as their objective to see that every home in their district has at least one person trained in the Red Cross first aid course, and that each home also has the recommended first aid kit and "Instructions for Survival Under Atomic Attack" prominently posted in the shelter area, with extra cots and supplies. They should also see that every block or its equivalent in the rural area, has at least one person trained in the Red Cross home nursing and one in the Red Cross nurses aid courses to work with headquarters at the block first aid station under the direction of the Block Warden; these are to be in addition to the ones trained for school-hospital duty and will constitute a good service.

3. The grammar school districts are to be grouped around the respective area high school districts and these in turn are to be affiliated with assigned existing hospitals. This will provide for the professional and technical assistance necessary for training and operations.

4. Repeated drills at regular intervals should be instituted with the participation of the staff of the parent hospital. Study periods should include basic knowledge about atomic and other explosive weapons, biological and chemical warfare, and defense measures against these agents. Improvisation of equipment and supplies, with appropriate storage, should be standard practice. Since the health service is the common denominator affecting all individuals, the opportunity should be utilized to have these drill periods also include instruction about the other civil defense services and the high degree of coordination which is essential. Particular reference is made to the close coordination with the emergency welfare centers in the churches and the welfare non-casualty intermediate evacuation centers in the American Legion posts and other specified assembly points, all of which will have an attached first aid station.

Professional and Technical Assistance Phase

1. Existing public health facilities are to be expanded for civil defense purposes and training facilities set up to provide the large number of auxiliary volunteer workers that will be needed.

2. Existing hospitals will fill key positions in training and operations. Each hospital will: first, prepare as soon as possible a comprehensive disaster plan to include standard operational procedures so that all concerned will know their duties when disaster strikes; and then plan for maximum expansion of present bed capacity and for evacuating occupied beds if disaster strikes, including utilization of surrounding buildings. Each will train additional technical personnel to the limit of its resources; will increase by 75 per cent, if possible, the reserve supplies carried; and will be prepared to channel Federal supplies as needed and available. Each hospital will establish close liaison with its affiliated improvised hospital system in the schools, described in the self-help and neighbor-help phase; furnish the professional and technical instruction and overall guidance needed; assist in making continuous inventory of existing and reserve supplies and equipment available in their areas, and advise on improvisation of same. Each will set up its medical disaster staff as discussed in the article: "What Every Georgia Physician Shoud Know About Civil Defense," which appeared in the October issue of the Journal of the Medical Association of Georgia.

3. The County Civil Defense Volunteer Medical Service (CDVMS) Corps will be composed of all medical, dental, and allied professional and technical personnel residing in the respective counties and will be available for emergency civil defense duties at all times. Its activities in time of emergency will be directed by the city civil defense control centers which are being established in the periphery of Georgia cities. In the interim, this corps will be actively engaged in self-training and the training of auxiliary technical and lay personnel.

4. The State Civil Defense Volunteer Medical Service (CDVMS) Corps will operate directly under the State Director of Civil Defense through the State Civil Defense Control Center. When called into action units of the corps will report to the local control center specified and remain under its direction until the assignment is terminated. The composition and manner of selection of this corps as well as other aspects of the professional and technical phases of the plan is discussed in the article above mentioned. The local components of this corps will not be called for duty elsewhere when its own community is the scene

*Over 1500 are listed by the 1951-52 Georgia Education Directory.

of a major disaster. Approximately 50 per cent of the professional and technical personnel of specified communities will be commissioned in the State CDVMS Corps.

Other Specific Assignments

Because of their eminent suitability the following will be asked to undertake these specific assignments:

1. The American Red Cross, which has already accepted the training responsibility in connection with first aid, home nursing, and nurses aid courses, will be asked to step up training facilities throughout the State and provide for more decentralized blood collecting facilities.
2. The Woman's Auxiliary to the Medical Association of Georgia with its affiliated county auxiliaries, and the Better Health Council of Georgia, where there are no medical auxiliaries, will be asked to concentrate on having their membership take the Red Cross first aid and instructor courses and furnish the Red Cross a large corps of instructors for rapid expansion of this vital activity. They will also be asked to recruit widely for volunteers to take the Red Cross first aid, home nursing, and nurses aid courses, to play substantial supporting role in the organization of hospital auxiliaries, and an active role in the liaison between these and the school district (P.-T.A.) personnel.
3. The Federated Women's Clubs will be asked to disseminate information about the Health Service Plan and stimulate its member clubs and the population at large to take the Red Cross courses and enlist actively in the school district improvised hospital program under the leadership of the Parent-Teacher Associations.
4. The American Legion will be asked to allow use of their approximately 250 meeting halls as welfare intermediate evacuation centers for non-casualties, to sponsor first aid mobile units throughout the state, to stimulate other male civic groups, such as CEKLOR, to do likewise, and coordinate these activities. The organization of these units is outlined in the article above mentioned. Training of high school students, Boy Scouts, and other personnel for these units will constitute a major activity in this connection.
5. The two medical schools will be asked to assist in standardization and training in the professional and technical fields. The training of a vast number of additional technicians with the help of the Georgia Hospital and Health Council and other organizations concerned is urgent. These schools will be asked to establish a pool of reserve technicians by providing the necessary training to medical and premedical students so that they will be available in case of emergency until the longer range training program has been fully implemented.
6. The Georgia Hospital Association will be asked to stimulate hospitals to formulate their disaster plans, and to participate in the intensive training of the personnel of their affiliated improvised hospital system based on the school districts. To facilitate liaison they will be asked to encourage the organization of individual hospital women's auxiliaries, and a statewide hospital women's auxiliary to the Georgia Hospital Association.
7. The Federal authorities concerned will be asked to incorporate civil defense instruction in their point-credit system for reserve medical personnel and thus permit the utilization of the valuable services of this highly trained group. There can be no better support for the military effort than a well trained civilian population.
8. The community hospital will be asked to cooperate with the county medical and other professional organizations concerned in the training of dentists and other allied professional personnel in first aid procedures in their emergency wards.
9. The State Welfare Department will be asked to endorse the American Legion participation above outlined, and to authorize the use of churches as welfare emergency centers with attached first aid facilities. This will provide some church membership personnel needed to operate these centers. Special psychiatric training of the preachers will make them still more invaluable in allaying panic which is a major problem in these emergencies.
10. The State Transportation Division will be asked to authorize assignment of school and laundry buses to the Health Division and thus greatly assist in this vital phase of planning.
11. The County Agricultural Agents, the Home Demonstration Agents, the Visiting Teachers, and the Jeanes Supervisors will be asked to disseminate information about the Health Plan and the part to be played by each individual as they visit the homes throughout the State.

During the last six weeks there has been a series of conferences with key groups involved for acceptance and implementation of the plan. First, Brigadier General Frank A. Kopf, the Deputy Director of the State Civil Defense, and his staff, approved the plan. Next, Mrs. Ralph Hobbs, president of the Georgia Congress of Parents and Teachers, and her civil defense committee headed by Mrs. Fred Knight, adopted the plan and began the vital job of contacting every local school and parent-teacher association and instructing them to put the plan in operation wherever it is approved by the local civil defense director. The concerted efforts of this powerful, ideally organized, energetic and serious minded group of women are immeasurable and the State can count on their continued interest, performance, and initiative in this connection at all times.

Next the assistance of the Woman's Auxiliary to the Medical Association of Georgia and the Better Health Council of Georgia was solicited and these organizations accepted their assignments enthusiastically. Talks on this plan have been scheduled for the Georgia Hospital Association and the Southeastern Hospital Association. The other groups mentioned are being contacted rapidly and there is every indication that they will do their part in this great undertaking.

The overall detailed plan, with training manuals, will be ready for distribution at the Annual Meeting of the Medical Association of Georgia in May. The objective of the National Medical Civil Defense Conference has been attained in Georgia. The initial long and arduous orientation and "meeting of minds" phase of the Health Services Civil Defense planning has been completed and the phase of intensive and widespread training now begins. The attention of the profession is invited again to the articles on this subject by members of the State Medical Civilian Preparedness Committee appearing in the October and November 1951 issue of *The Journal of the Medical Association of Georgia.* Every physician can aid by informing his patients and the public about these plans and cooperating with local civil defense authorities in putting them into effect.

In a broader sense, it should be realized by the citizenry at large that this country is faced with a new way of life, brought about by the two irreconcilable ideologies, namely, that the state exists to serve the individual and that the individual is simply a cog in the all-powerful state machinery. As such, civil defense is to be thought of not in terms of desperate preparation for one great catasrophe, but rather as a continuous state of readiness for what-

ever may happen. Milton's words, "They also serve who only stand and wait" have application here provided there has been proper training and preparation.

In commenting on the desirability of changing local enabling legislation to allow civil defense authorities to act, not only in wartime, but in any major disaster, such as the recent Kansas-Missouri flood, *The Journal of the American Medical Association* of Nov. 24, 1951 stated in a significant editorial:

"If we learn as a profession and as a nation from such national disasters as the Kansas-Missouri flood, the civil defense lessons which are thus so expensively taught, we may be prepared to cope with the infinitely greater emergency that an all-out war wound bring. It is time to realize that civil defense is not a game or a scheme but, rather, a new and important civic responsibility and a pattern for national survival."

Our forefathers were faced with a similar preparedness problem, which to them must have seemed of comparable magnitude. They succeeded, in spite of constant threat of aggression, in establishing on this continent one of the great nations of all times. We, their descendents, can well emulate their example. By so doing we can attain still higher standards of healthful living that will inevitably come from the close cooperation between the medical and allied professions and the general public which a successful civil defense training program of necessity requires.

Present Status of TYPHUS FEVER *in Georgia*

ROY J. BOSTON, Director

Typhus Control Service, Georgia Department of Public Health

Murine or endemic typhus fever was first described by the late Dr. James E. Paullin of Atlanta in 1913. Shortly thereafter, the disease was recognized in Augusta and Savannah. Since that time cases have been reported from all but six counties in Georgia, but the incidence of the disease has been much higher in the southern half of the state. During the five year period, 1946 through 1950, approximately 90 per cent of all reported cases occurred south of an imaginary line running from Augusta through Macon to Columbus.

For almost two decades following Dr. Paullin's report, the incidence of typhus in Georgia remained at a comparatively low level, the average number of reported cases being less than 50 per year. In 1930 a marked increase in the number of cases was observed and this upward trend continued through 1937, after which the incidence of the disease remained at a high level through 1945. During the 10 year period, 1936 through 1945, the average number of reported cases was more than 1,000 per year. Obviously, typhus fever had become a major public health problem in Georgia.

Since murine typhus is primarily a disease of rats, the earliest efforts at control were directed toward the rat. Later, when DDT became available, control efforts were also directed toward the rat flea.

In Georgia we are concerned with three species of domestic rats, all of which are typhus carriers; namely, the brown rat (Rattus norvigicus), the black rat (Rattus rattus rattus), and the roof rat (Rattus rattus alexandrinus). The principal vector of the disease is the Indian rat flea (Xenopsylla cheopis), but it is quite possible that other rat ectoparasites are important in transmitting the infection from rat to rat and, occasionally, from rat to man. Studies indicate that rat flea indices conform, in general, to the seasonal curve of typhus fever which is lowest in February and March and highest during July, August, and September.

A state-wide typhus control program was organ-

Georgia Department of Public Health

ized by the Department of Public Health in 1937. Control measures were directed principally toward rat eradication, rat proofing, and the encouragement of local communities to employ sanitary methods of refuse collection and disposal. In cities and towns which inaugurated satisfactory programs, a decline in the number of reported cases was observed but the number of communities which adopted these measures was too limited to materially affect the incidence of typhus in the state as a whole.

During the latter part of 1945, with the assistance of federal funds, the control program was greatly expanded. Moreover, as DDT became availabel it was used to control the rat flea. The DDT dusting of rat runs and harborages was employed as a first line weapon to effectuate immediate control of the disease by preventing transmission from rat to man. With the inauguration of this program, a dramatic and continuing decline in the incidence of typhus was observed as shown in table 1.

TABLE 1

Incidence of Typhus Fever By Years

Year	Reported Cases
1945	1,111
1946	606
1947	441
1948	216
1949	214
1950	162
1951 (10 months)	54

As an additional means of evaluating the effectiveness of control operations, county-wide surveys have been conducted to determine the incidence of infection among the rodent population. By uncovering foci of infection, these surveys have also made it possible to concentrate control measures where they are most needed, thereby reducing the extent and cost of control operations.

Table 2 summarizes the results obtained in the examination of rat blood specimens for the presence of typhus antibodies. Since the rats were trapped at random throughout the state, the percentage of positive bloods provides a reliable index of the level of infection. It will be noted that the proportion of bloods showing antibodies declined rapidly during the five year period, indicating that control measures were highly effective in preventing the spread of infection from rat to rat.

TABLE 2

Typhus Antibodies in Rat Blood Specimens

1946-1950

Year	Number Examined	Number Showing Antibodies	Per cent Positive
1946	3,267	1,038	31.6
1947	3,145	846	26.9
1948	3,496	492	14.1
1949	5,087	555	10.9
1950	3,220	303	9.4

Prior to 1945, typhus fever in Georgia was primarily a disease of the cities, towns and villages. Following the inauguration of the expanded control program, however, the incidence of typhus declined so markedly in the urban areas that today the majority of cases are occurring in rural areas.

In view of the fact that federal financial assistance has been reduced about two-thirds since 1947, it has been necessary to curtail control operations to a similar extent. At the present time, control measures are concentrated in areas where foci of infection in the human and rodent populations are known or suspected to exist. Moreover, since many open garbage and refuse dumps provide a continuous food supply for rats and offer sufficient harborage to maintain a large rodent population, local agencies are encouraged to improve their collection and disposal facilities and to carry on a continuous rat eradication program. During recent years, about 25 cities and towns have abandoned the open dump method of refuse disposal and have substituted the sanitary land fill method of disposal.

Although the incidence of typhus fever in Georgia has shown a marked decline during the past five years, the disease must still be considered a potential public health problem of major importance. So long as available food supplies and harborages are sufficient to maintain a large rodent population, foci of infection which now exist might readily expand and again become a menace to the human population. In order to prevent a repetition of the high incidence of typhus experienced in the past, control operations will be needed for some years to come.

A Report on the National Conference

on PHYSICIANS *and* SCHOOLS

GUY V. RICE, M.D., Director

Division of Maternal and Child Health, Georgia Department of Public Health

I should like to make the following report on the National Conference on Physicians and Schools, sponsored by the American Medical Association, in Chicago, Ill.

At the Conference there were representatives from the American Medical Association, national educational associations and organizations, state and local health departments, state and local school administrators, teachers, physicians in private practice, and representatives of state medical associations and medical schools. This was a good representation, but could have been better if more physicians in private practice had attended.

One of the things emphasized at the meeting was the responsibility of the family in matters pertaining to the health of the school-age child, as in other health programs for the members of the family. The school also has responsibilities for the health of the school-age child, and physicians need to recognize this and accept responsibility in planning and execution of community public health programs of which school health services are a part.

Since emphasis was placed on family responsibility, I believe the Conference would have been more complete had there been people there representing parents, rather than all of them being from the educational or medical framework.

The purposes of the Conference listed in the program were:

1. To evaluate progress made in the development of school health services since the 1949 Conference on Physicians and Schools.

2. To promulgate policies that will promote the kind of health services that will serve the best interests of growing children.

3. To discover methods of working together at state and local levels so that joint actions by the public health, educational and medical professions will lead to the development of effective health services for school children.

4. To explore both old and new technics for the administration of school health services and to evaluate their effectiveness in view of the recognized responsibility of each family for the health of its children.

The Conference was set up to function in a democratic fashion, first with a general session, after which it broke up in five groups to cover the following areas:

1. Health Appraisal of School Children

2. Emergency Services for Accidents and Sudden Illness.

3. Health Services in Physical Education Including Athletics.

4. Follow up to Meet Child Health Needs.

5. New Concepts in Control of Communicable Disease.

Consultants outlined the groundwork upon which to base discussions of problems in selected areas. There was more or less free discussion in various groups, after which all the participants met in a general session for reports. At the end of the last morning at a general session each group made a report of action and recommendations.

There were two evening sessions, one of which was taken up with reports from states having made special contributions in the field of school health. At the other evening meeting the guest speaker, Mr. Richard L. Grossman of Ohio, discussed Communications.

Considering the ideas expressed at the Conference, I believe that Georgia is advancing along sound lines on the matter of school health in that the State Education Department and State Health Department are working together to formulate and administer policies to develop a school health program.

With the responsibilities of each definitely defined, generally on a local level, the Department of Education assumes the responsibility for providing the physical plant and facilities for adequate, comfortable, attractive, and healthy environment, and the County Health Department assumes the responsibility for health services rendered by its personnel. The classroom teacher gives personal health appraisal which include services in screen, ing, observation, and teacher-nurse conferences. The public health nurse does consultation with teachers, parents, etc., and does the job of follow-through and interpretation with child, parents, family doctor, and teacher.

The successful development of such programs depends on bringing all groups into the plan on the community level. This includes lay programs, health departments, educational departments, medical societies and other organizations, with each taking its share of responsibility.

This is the third National Conference on Physicians and Schools. Good contributions have been made from the previous two, and I believe that this one will likewise be productive.

The Association

First Meeting of the

MATERNAL CARE *Committee*

The Maternal Care Committee of the Medical Association of Georgia met in Augusta on the afternoon of October 18 following the meeting of the Georgia Obstetrical and Gynecological Society. Committee members present were: Dr. Sharpley, chairman, Dr. Torpin, Dr. Bickerstaff, Dr. McCain, Dr. Rice, Dr. Colvin was absent.

The main topic of conversation was concerned with getting the work of the committee under way. It was agreed that a study should be made of maternal deaths; that the committee would meet at least twice each year to study maternal deaths; and that physicians whose cases were to be considered would be invited to attend the meeting. Atlanta was selected as the most logical place of meeting. The question as to whether or not the State Health Department could pay travel to physicians attending the meeting from out of town was discussed. Dr. Rice, director of the Maternal and Child Health Division of the State Health Department, stated that this could be done. Manner of payment was not settled exactly.

The blank form used in South Carolina to obtain information about maternal deaths was adopted by the committee with minor changes to make the blank conform to the Georgia birth certificates. It was agreed that the State Health Department would handle the clerical work involved in distribution of questionnaires and other matters for the committee.

The committee discussed bringing to the attention of the Vital Statistics Division (through MCH Director) the fact that the line on the birth certificate requiring listing date of blood test was causing considerable trouble, as many of these certificates were made out at the hospital and the results of the blood tests were in the doctors' offices. It was also suggested that unless there was some definite reason for obtaining this information that this be deleted from the certificate.

It was the recommendation of this committee that should effort be made to change the law requiring the use of silver nitrate in the infants' eyes after birth to permit this to be handled by regulations of the Board of Health, that support be given such an amendment.

The chairman will notify the members of the date of the next meeting.

News and Information

SOCIETIES

Georgia Medical Society at its meeting on December 11 named Dr. Howard J. Morrison as its president-elect, to take office in 1953. Dr. J. H. Pinholster was installed as president by Dr. Laurence B. Dunn, who completed his term as head of the organization. Other officers chosen were Dr. Jacob Rubin, vice-president, and Dr. Lawrence Lee, Jr., secretary-treasurer.

Picked as delegates to the annual meeting of the Medical Association of Georgia were Drs. T. A. Peterson, John Elliott and Ruskin King; as alternate delegates, Drs. William Fulmer, Lee Howard, Jr., and David Robinson.

Two nights later the Society and the Savannah Tumor Clinic jointly sponsored a forum at which the following medical men discussed various aspects of cancer: Drs. John E. Dunn, Jr., National Cancer Institute; Col. J. M. Blumberg, pathologist, Walter Reed Hospital; H. E. Neiburgs, professor and director of clinical cytology, Medical College of Georgia; Paul Werner, secretary of the committee on research, American Medical Association, and George L. Wied, assistant surgeon of the gynecology clinic at Santiago, Chile.

Sixth District Medical Society met at Macon on December 5 with the following scientific program: "Common Moles and Melanoma," Dr. R. M. Reifler; "Differential Diagnosis of Upper Lung Field Densities," Dr. H. M. Olnick; "Treatment for the Advanced Malignancy," Dr. J. B. Stewart, and "Cancer of the Cervix," Dr. R. W. Edenfield, all of Macon.

A business session followed, during which the announcement was made that Dr. A. M. Phillips of Macon had been appointed by the Governor as Sixth Congressional District member on the State Board of Health. The five-point program, as advocated in the September Journal editorial, was then read, discussed and endorsed by the members present.

Officers elected for 1952 were: Dr. E. B. Claxton, Dublin, president; Dr. William Rawlings, Sandersville, vice-president, and Dr. C. H. Richardson, Jr., Macon, secretary-treasurer.

Following the business session, a mixing hour, banquet and dance were held at the Idle Hour Country Club.

Bartow County Medical Society elected Dr. Lewis R. Whatley as president at a meeting held on December 19 in the office of Dr. William B. Dillard, Jr., in Cartersville. Named as vice-president and secretary-treasurer, respectively, were Drs. William B. Quillian, Jr., and Dillard. Dr. A. L. Horton was chosen as delegate to the Medical Association of Georgia meeting, and Drs. H. B. Bradford, S. M. Howell and Horton as censors.

Fulton County Medical Society held an anniversary banquet at the Piedmont Driving Club, Atlanta, on January 4, dedicated to those members of the profession who have practiced medicine in the county for 50 years or more and also commemorating the 10th year of its new Academy of Medicine.

The 50-year physicians honored were: Dr. W. L. Champion, the dean of the group, who entered practice in 1898, and Drs. Charles E. Boynton, James N. Brawner, Sr., I. T. Catron, L. C. Fischer, William S. Goldsmith, C. W. Strickler, Sr., S. A. Visanka, L. C. Roughlin, James H. Crawford, Thomas W. Collier, J. R. Garner, Hugh M. Lokey, and G. Pope Huguley.

Dr. Jack C. Norris was installed as president of the society, succeeding Dr. Hal M. Davison, who was presented the president's key by Dr. T. C. Davison. Dr. William G. Hamm is president-elect, Dr. Charles Eberhart vice-president and Dr. Tully T. Blalock secretary-treasurer.

Dr. Frank Boland presented the honorary president's key to Dr. T. F. Abercrombie, retired director of the Georgia Department of Public Health, in recognition of the latter's long and distinguished service in the public health field. The Dr. L. C. Fischer awards were presented by Dr. Allen H.

Bunce to Dr. John N. McClure, Jr., for the best scientific paper of the year, and Drs. George A. Williams and A. Cullen Richardson for the best original research. Dr. McClure's paper dealt with treatment of stomach and duodenal hemorrhage, while Drs. Williams' and Richardson's research consisted of the development of a new gynecologic operation.

Dr. Norris in his inaugural address said that during his term in office he would seek to establish committees to study alcoholism and the diseases of the aged. He also advocated the formation of groups to improve hospitalization and reduce costs of hospital care. The Society also heard an address by Dr. Monroe F. Swilley, Jr., pastor of Atlanta's Second-Ponce de Leon Baptist Church, who had recently returned from a trip to Japan and who described conditions there.

Glynn County Medical Society met at City Hospital in Brunswick on December 11 and elected the following officers: Drs. I. G. Towson, president; H. L. Moore, vice-president; T. H. Johnston, secretary-treasurer; C. A. Wilson, Jr., delegate to the Medical Association of Georgia; Mack Simmons, alternate delegate; and J. M. Hicks, Frank Mitchell and S. P. McDaniel, board of censors.

Habersham County Medical Society met on December 13 at the Commercial Hotel in Cornelia and decided that since three counties—White and Rabun as well as Habersham—are represented in the organization, its name should be changed to one more appropriate. Drs. J. J. Arrendale, George Boyd, Jr., and George Tolhurst were appointed as a committee to suggest possible names at the next meeting.

The Society elected as its new officers: Drs. George T. Nicholson, president; Tolhurst, vice-president; C. M. Henry, secretary-treasurer; Arrendale, delegate to the Medical Association of Georgia; Boyd, alternate delegates; J. L. Walker, public relations officer; and T. H. Brabson and C. T. Hardman, censors.

The group agreed that any complaints the public might wish to make against any member of the profession should be submitted to the Society, and that if a satisfactory solution could not be thus obtained the situation would be referred to the grievance committee of the Ninth District Medical Society.

The scientific program was presented by Dr. C. W. Whitworth, who spoke on "Eye Injuries."

Laurens County Medical Society held its annual dinner meeting at the Dublin Country Club on December 13.

Memorial tributes were paid to Dr. Glenn G. Mullins and Dr. L. I. Lanier, members of the Society who died during 1951. Dr. J. A. Thurston spoke on the career of Dr. Mullins, and Dr. E. B. Claxton on that of Dr. Lanier.

Dr. Claxton, newly-elected president of the Sixth District Medical Society, discussed plans of his group for 1952.

The guest speaker was Dr. H. Dawson Allen, Milledgeville, whose topic was, "The Use of ACTH and Cortisone in Mental Disease".

Officers for 1952 were elected, as follows: Drs. James L. Bush, president; M. Fernan-Nunez, vice-president, and Robert T. Anderson, secretary-treasurer. A vote of thanks was given Dr. Ovid H. Cheek for his services for the past 27 years as secretary-treasurer.

ANOUNCEMENTS

The Alabama Section will be host to the Southern Assembly of International College of Surgeons (Alabama, Tennessee, Louisiana, Mississippi, Florida, Georgia, North Carolina and South Carolina) on February 15 and 16 at the Tutwiler Hotel, Birmingham. A full two days of surgical papers and panels by outstanding essacerts is assured. All physicians and their wives are cordially invited.

Nine laboratory refresher courses covering the serology of syphilis, the Treponema Pallidum Immobilization Test and the laboratory diagnosis of venereal diseases to be conducted at the Venereal Disease Laboratory in Chamblee, Georgia, during 1952. The courses started in January and are open to senior technicians and to laboratory directors throughout the United States and the territories who are presently employed in the field.

The list of courses for the calendar year follows: Serology of Syphilis, January 14-25, March 10-21, April 14-25, May 12-23, September 8-19 and October 13-24. Laboratory Diagnosis of Venereal Disease (directors' course), May 12-16. Treponema Pallidum Immobilization Test (directors' course), May 19-23. Preparation and Use of Controls in Serologic Tests for Syphilis, November 3-21.

Applications for these courses must be approved by the state health officer or the state laboratory director of the region from which they are sent and should be addressed to: Director, Venereal Disease Research Laboratory, Division of Venereal Disease, Box 185, Chamblee, Ga.

The 15th annual meeting of the New Orleans Graduate Medical Assembly will be held March 10-13, with headquarters at the Municipal Auditorium. Eighteen outstanding guest speakers will participate and their presentations will be of interest to both specialists and general practitioners. In addition, the program will include symposia on "Resuscitation" and "Complications of Antibiotic Therapy and Their Management," daily demonstrations of medical and surgical procedures in color television, clinicopathologic conferences, medical

motion pictures, over 100 technical exhibits and three round-table luncheons.

The Assembly has planned another interesting postclinical tour to follow the 1952 meeting in New Orleans. On March 15, a party composed of doctors and their families will leave by plane for Merida, Yucatan, Mexico. The itinerary also includes Mexico City, Cuernavaca, Taxco and Acapulco. Arrangements have been made for medical programs and visits to hospitals in Merida City. The groups will return to New Orleans on March 29.

Details of the New Orleans meeting and the postclinical tour are available at the office of the Assembly, Room 103, 1430 Tulane Avenue, New Orleans 12, La.

The National Society for Crippled Children and Adults, the Easter Seal Society, will hold its annual convention in San Francisco, October 25 through 30, with the Fairmont Hotel as convention headquarters. Nationally recognized authorities in all professional fields related to work with the crippled will participate in the program.

The annual meeting of the Delegate Assembly of the National Society and its 2,000 affiliates in the 48 states, District of Columbia, Alaska, Hawaii and Puerto Rico will be part of the convention activities.

The Georgia Society of Ophthalmology and Otolaryngology holds its annual meeting Friday and Saturday, March 7 and 8, 1952, at the well known resort hotel, The General Oglethorpe, Wilmington Island, Savannah.

Given below is a list of our guest speakers and their subjects for the two days: Dr. Murray F. McCaslin, Pittsburgh, Selection of Anesthesia in Ophthalmology; Dr. J. Conrad Gemeroy, Detroit, External Diseases of the Eye. The Management of Metallic Intraocular Foreign Bodies; Dr. Joseph S. Haas, Chicago, The Differential Diagnosis of the Primary Glaucomas. The Provocative Tests in Glaucoma; Dr. Henry B. Orton, Newark, Applied Surgery of the Neck (Both days); Dr. Albert P. Seltzer, Philadelphia, Plastic Surgery of the Nose (Both days); Dr. John R. Lindsay, Chicago, "Vertigo: Differential Diagnosis and Treatment". Secretory Otitis Media.

Registration fee is $20.00.

W. Eugene Matthews, M.D., Secretary Treasurer, Augusta.

LETTERS

December 27, 1951

To the Secretary, Medical Association of Georgia:

According to the records in the office of the Secretary of the American Medical Association on December 1, 1951, there were 1,820 members of the Medical Association of Georgia enrolled as active members of the American Medical Association. Your constituent association, therefore, is entitled to two delegates in accordance with the apportionment now in effect of one delegate for each one thousand, or fraction thereof, active members.

The Certificate of Election of Delegates and the Delegates' Credentials Cards will be sent you within the next month.

Sincerely yours,
George F. Lull
Secretary and General Manager
American Medical Association.

PROFESSIONAL

Dr. Joseph C. Reid, of Atlanta, was elected president of the *Georgia Industrial Surgeons Association* at its fifth annual session, held on December 8 at the Academy of Medicine, Atlanta. Dr. W. W. Battey, Augusta, was chosen as president-elect, and Dr. Allen M. Collinsworth, Atlanta, was re-elected secretary-treasurer.

Retiring officers of the Association were: Dr. John W. Simmons, Brunswick, president, and Dr. Read, Atlanta, vice-president.

As members of its Judicial Council the organization named Dr. R. L. Rhodes, Augusta, chairman; Dr. B. H. Minchew, Waycross, and Dr. Simmons. Council members in 1951 were Drs. Rhodes, Minchew and C. F. Holton, Savannah.

The membership of the Association is now approximately 100, the largest in the history of the reactivated group.

Speakers on the day's program were: Dr. Simmons, "Purposes of This Organization"; Dr. Frank F. Kanthak, Atlanta and Emory University School of Medicine, "Plastic Repair of Wounds and Lacerations"; Dr. William A. Hopkins, Atlanta and Emory, "Treatment of Wounds of the Chest"; Dr. Randolph Smith, Atlanta and Emory, "Treatment of Ankle Injuries"; Andy Robertson, Atlanta, "Today's Claim Problems"; Arlie D. Tucker, chairman of the State Board of Workmen's Compensation, "Recommendations of the Industrial Board."

In addition, Dr. Holton served as moderator for a panel discussion on "Revised Fee Schedule."

The first annual meeting of the *Georgia Society for Crippled Children* was held at the Academy of Medicine, Atlanta, on November 6-7.

Demonstrations of services to crippled children were given at the opening session by teams led by Dr. Robert L. Bennett, director of physical medicine for the Warm Spring Foundation and professor in the Emory University School of Medicine; Miss

Mary Rose Costello, director of the Atlanta Junior League School of Speech Correction, and Dr. Harriet E. Gillette, of the State Health Department Crippled Children's Division.

At the second session, Dr. O. C. Aderhold, president of the University of Georgia, discussed "Education for Exceptional Children"; Dr. Darrel J. Mase, coordinator of the Florida Center of Clinical Services, "What Is Special Education?"; Dr. Romaine P. Mackie, of Schools for the Physically Handicapped, U. S. Office of Education, "Developing a State and Local Program of Education for Physically Handicapped Children"; and H. B. Cummings, U. S. Office of Vocational Rehabilitation, "Vocational Rehabilitation for Handicapped Children."

At the dinner on the evening for the first day, Lawrence J. Linck, executive director of the National Society for Crippled Children and Adults, Chicago, spoke on "The Role of the State Society in a Program of Services to Crippled Children."

At the final session, held on the morning of the 7th, Dr. Irvin V. Sperry, University of Georgia professor, Miss Eileen Lester, of the U. S. Children's Bureau, and Miss Louise D. Davison, director of the Davison School of Speech Correction, Atlanta, led a panel discussion on "Practical Adjustments to the Crippled Child in the Home," and Miss Elizabeth H. Wagner, of hte National Society for Crippled Children and Adults, New York, conducted a demonstration and led a discussion on "Adapting Toys and Equipment for Home Use."

Presiding at the respective sessions were: Herman L. Turner, president of the Georgia Society; Mrs. Bruce Schaefer, secretary; Mrs. Shelley C. Davis, program committee chairman; and Georgia Secretary of State Ben W. Fortson, Jr., treasurer.

PERSONALS

Dr. James D. Bozeman, a native of Andalusia, Ala., and a graduate of the Medical College of Georgia, has entered practice in Franklin, in association wtih Dr. George Fisher.

Dr. L. G. Cacchioli, Hartwell, has about completed construction of a new office building on West Howell Street.

Dr. and Mrs. J. W. Chambers, of LaGrange, were nearly asphyxiated by escaping carbon monoxide gas as they lay sleeping in the home of Mrs. Chamber's mother in St. Petersburg, Fla., in December. Fortunately, Dr. Chambers awakened in time and aroused his wife.

Dr. and Mrs. P. O. Chaudron, of Cedartown, returned late in November from an extended visit with their son and daughter in Paris, France. While in Europe they visited many countries.

Dr. Robert F. Eaves, Jr., who recently was discharged from the Army Medical Corps after extended service with the First Cavalry Division in Korea, has entered practice in Pearson, with offices in the City Hall. He is a native of Tucker and a graduate of Emory University School of Medicine.

Dr. J. W. Garner, formerly of Ashburn, has moved to Crawfordville and entered practice, giving Taliaferro its only resident physician. He is a graduate of the Medical College of Georgia.

Dr. J. T. Giles, formerly of Griffin, has moved to Valdosta and entered general practice. He has taken a suite of offices over the Giles Drug Company, which is operated by his brother, G. N. Giles. Dr. Giles is a graduate of the Medical College of Georgia.

Dr. Irving L. Greenberg, Atlanta, has been appointed a member of a special national committee of the American Red Cross to study the nation's blood bank situation.

Dr. Eugene L. Griffin, of Atlanta, obstetrician and gynecologist, announces the removal of his offices to 26 Linden Avenue, N. E.

Dr. Charles S. Jones, of Atlanta, with the aid of his brother, hooked a total of 131 sea bass weighing 374 pounds in Hampton River, north of Sea Island, in November, while a guest at the Cloister Hotel. The catch was probably the best of the season in the area.

Dr. and Mrs. H. G. Lee, of Millen, celebrated their silver wedding anniversary with a reception on November 11 in the Millen Community House where they received 400 guests.

Dr. and Mrs. Council Herring Maxwell, of Calvary, observed their golden wedding anniversary on December 7 at their home, where their seven children honored them at a reception attended by more than 300 relatives and friends.

Dr. Thomas C. Nash in December was elected to the board of directors of the Washington Loan and Banking Company, Washington. He succeeds the late Dr. T. B. Walton.

Dr. L. P. Pharr, of Auburn, was honored in December when the "Doctor Pharr Baby Club," composed of persons he has delivered, furnished a double room in the Winder-Barrow Hospital in his name. A year before, 2,000 attended a "Doctor Pharr Day," at which he and Mrs. Pharr were given a new automobile, a television set and a table.

Dr. A. B. Reynolds, of Cairo, in November announced the association with him in general practice of Dr. A. W. DeLoach, who had been in practice in Cairo since August. Their offices are

at the Maxwell Reynolds Clinic, named in memory of the late Dr. H. M. Reynolds.

Dr. J. G. Standifer, of Blakely, has been installed as grand master of Georgia Masons.

Dr. C. J. Tucker in November received from the Lithonia Masonic Lodge a gold pin for having been a Mason for 50 years.

Dr. Perry Volpitto, of Augusta, recently was appointed cochairman of the program committee of the American Society of Anesthesiologists.

Dr. E. M. Walker, Jr. a former resident of Pelham, returned there in November and opened a practice, with offices in the Pelham Clinic.

Dr. Charles H. Watt, Jr., chief of surgery in residence at Union Memorial Hospital, Baltimore, Md., plans in June to join his father, Dr. C. H. Watt, Sr., in the practice of surgery in Thomasville.

Dr. Fred Schmidt and *Dr. T. J. Vansant, Jr.* and their wives, newcomers to Marietta, were honor guests at an open house given on December 11 by Dr. and Mrs. William H. Benson, Jr.

Dr. J. W. Watts, who served as mayor of Bowdon in 1949 and in 1950, again was elected to that office, without opposition, for 1952 and assumed his duties on January 14.

Dr. James Randall Winburn, Jr., a native of Savannah, in December opened offices for the general practice of surgery in the DeRenne Apartment Building there. A graduate of the Columbia University College of Physicians and Surgeons, Dr. Winburn served his internship at Bellevue Hospital, New York City, and took postgraduate training at the Mayo Clinic.

AUXILIARY

Sixth District Auxiliary met on December 5 at the YWCA Building in Macon and heard a talk by Mrs. Stewart Wootten, professor of health education at Georgia State College for Women, Milledgeville, on "Health, a Cooperative Program in Democracy." Mrs. Wootten was introduced by Mrs. J. R. S. Mays, president of the Auxiliary to the Medical Association of Georgia. Mrs. Edwin W. Allen, Milledgeville, manager of the Sixth District Auxiliary, presided. The Sixth District members were guests for the afternoon of the Bibb County Auxiliary.

Baldwin County Auxiliary held its November meeting at the Sanford House, Milledgeville, and heard a report by Mrs. Edwin W. Allen, Sixth District Auxiliary manager, who outlined the district auxiliary's plans for the coming year. The group voted to cancel its December meeting, inasmuch as the December Sixth District Auxiliary meeting in Wacon could serve for this session.

Dougherty County Auxiliary met on December 4 at the Albany home of Mrs. P. L. Hilsman and heard W. I. Fender, Phoebe Putney Hospital administrator, discuss the cost of operating a hospital. The importance of public relations and the role Auxiliary members can play in this program were pointed out by Mr. Fender. The group adopted a resolution urging that a tuberculosis isolation home be built in Albany. Mrs. Paul Russell presided at the business session. On December 15 members of the Dougherty Auxiliary and their husbands were entertained at a covered-dish supper given at the home of Dr. and Mrs. Hilsman. After the meal, dancing was enjoyed. Mrs. Hilsman and Mrs. Edward Armstrong were in charge of the party.

Fulton County Auxiliary had as a feature of its December 7 meeting a shower of children's books, decked in Christmas wrappings, for the boys and girls who were patients at Grady Hospital, Atlanta. The gay packages first were used as a decorative motif for the luncheon table, then were delivered to Grady. With Mrs. E. A. Bancker as chairman, the program theme was "The Doctor's Wife Relaxes With a Book." The speaker was Miss Evelyn Jackson, associate professor of librarianship at Emory University, who told of some recent books which might be of especial interest to doctors' wives. Mrs. J. K. Fancher served as hostess chairman, Mrs. Byron Harper as luncheon chairman.

MISCELLANY

Four out-of-state speakers addressed the Symposium on Alcoholism presented by the Georgia Commission on Alcoholism in Wesley Memorial Church, Atlanta, on January 18.

These speakers and their topics were: Dr. Raymond G. McCarthy, executive director, Yale (University) Plan Clinic, "Alcoholism—Nature of the Problem"; Dr. Leon Greenberg, Yale Laboratory of Applied Psychology, "The Physiological Action of Alcohol"; Ralph M. Henderson, field representative, Yale Section of Alcohol Studies, "Alcoholism a Problem for Industry", and Dr. Ebbe C. Hoff, medical director, Division of Alcohol Studies and Rehabilitation, Richmond, Va., "New Horizons in Treating Alcoholics."

A fifth address was given by Dr. Charles L.

Allen, pastor of Atlanta's Grace Methodist Church, on "Spiritual Help for the Alcoholics."

Dr. A. H. Letton, president of the Sheffield Cancer Clinic, Atlanta, served as moderator for the morning program, and Dr. Harmon W. Caldwell, chancellor of the University System of Georgia, as moderator for the afternoon and evening sessions. Paul H. Fraser, executive director of the Georgia Commission, presided. In the evening a panel discussion was conducted, with all the speakers participating and answering questions.

The Symposium was presented with the cooperation of the Medical Association of Georgia, Greater Atlanta Safety Council, Georgia Citizens Council, Associated Industries of Georgia, Georgia Peace Officers Association, American Federation of Labor, Congress of Industrial Organizations, State Chamber of Commerce and State Conference on Social Welfare.

At the request of physicians and dentists representing the staff of Tanner Memorial Hospital and the health committee of the Lions Club, Carrollton City Council has approved a request that the city's new water system include fluorination equipment to be used in helping prevent tooth decay among users of the water. The request was passed on to the Water and Light Commission, which was to make a final decision.

Dr. Bernard P. Wolff, Atlanta, has been appointed chairman of the Georgia branch of the National Doctors Committee for Improved Federal Medical Services.

Others on the state committee are: Drs. P. C. Herault, LaGrange; C. Roy Williams, Wadley; Joe Neighbors, Athens; Robert Greenblatt, Augusta; Rafe Banks, Gainesville; W. G. Love, Jr., and G. M. Hutto, Columbus; O. Emerson Ham, Savannah; C. R. Andrews, Jr. Canton; Martin Cummings, Chamblee; and Hugh Hailey, Sterling Claiborne, Robert Mabon, W. T. Edwards, Paul Rieth, Frank Kanthak and Darrell Ayer, all of Atlanta. Dr. Charles Rieser, Atlanta, is a member of the national advisory board of the organization, representing the specialty of urology for the entire nation.

The Committee, with membership in all 48 states, was formed to discover the thinking of the medical profession concerning the recommendations of the Hoover Report, now before Congress, for the unification of the federal medical services under a single control.

DEATHS

ARMSTRONG: *Dr. T. Blake Armstrong,* former Atlanta physician, died December 2 at St. Simons Island, where he had made his home since retiring from practice five years ago. A native of Franklin, he attended Emory College, then taught at Boys High School, Atlanta, for several years before entering Emory University School of Medicine, from which he was graduated in 1913. Served as major in World War I.

DICKIE: *Dr. Emmet H. Dickie,* 65, of Chatsworth, who had been a general practitioner in Murray County for 35 years, died November 15. Born in Alabama, he was graduated from Georgia College of Eclectic Medicine and Surgery in 1913. Was former Chatsworth mayor, member of County Board of Health and of Murray County Memorial Hospital board of directors.

HINES: *Dr. Joseph H. Hines,* Atlanta physician since 1903, died December 3. Born in Bristol, R. I., he was graduated from the University of Vermont, took postgraduate work at New York Postgraduate School and New York Lying-In Hospital. Formerly medical director of Grady Hospital and member of the faculties of Emory University School of Medicine and Oglethorpe University. Was member of American College of Physicians and American Board of Internal Medicine.

HURLEY: *Dr. Thomas A. Hurley,* 72, of Macon, died December 21. Born in Macon, he was graduated from the College of Physicians and Surgeons of Baltimore in 1904, then took postgraduate work at Polyclinic Hospital, New York City, and did laboratory work at Springs Grove Hospital for the Insane in Maryland. Returning to Macon, he was resident physician at Macon Hospital for a time, then entered private practice. Served several years as Bibb County physician.

HUTCHINGS: *Dr. Ernest H. Hutchings,* 65, died December 2 in Columbia, S. C., where he had been taken for treatment after suffering a heart attack several weeks earlier. A 1913 graduate of the Medical College of Georgia, he practiced first in Linton, then in Cornelia, before moving to Sparta. Ill health forced him to retire some time ago.

LANIER: *Dr. Leon I. Lanier,* 67, of Soperton, died November 17. Was a 1909 graduate of Atlanta School of Medicine, now Emory University School of Medicine.

NORTON: *Dr. Walter Abell Norton,* 70, Savannah surgeon, died December 3. Was graduated from Atlanta College of Physicians and Surgeons, now Emory University School of Medicine, in 1903. Was chief surgeon on staff of Warren A. Candler Hospital, Savannah, surgeon for American Can and Savannah Electric and Power Companies. Past president of the Georgia Medical Society. Fellow of American College of Surgeons, senior fellow of Southeastern Surgical Conference. Author of numerous pamphlets and articles on surgery.

REYNOLDS: *Dr. Horace Maxwell Reynolds,* 33,

of Cairo, was drowned on November 19 in a boating accident at Lake Iamonia, near Cairo. A 1943 Medical College of Georgia graduate, he practiced with his father, Dr. A. B. Reynolds, in the Reynolds and Reynolds Clinic, which has since been named the Maxwell Reynolds Clinic in his honor. Served two years in Army Medical Corps in War II.

WILLIAMS: *Dr. Virgil Gaines Williams,* 75, of Grantville, died December 16 of a heart attack. Born near Chipley, he was graduated from College of Physicians and Surgeons, Baltimore, Md., in 1901; did postgraduate work at Johns Hopkins University. Practiced in Chipley and Odessadale before coming to Grantville in 1927.

HOSPITALS

Dr. Thomas H. Lamson has accepted the position of administrator of *Arlington City Hospital* and has moved his offices there. He succeeds Dr. Whitley, who resigned on December 15 to accept a similar post at Terrell County Hospital, Dawson.

Dr. John Stegeman was elected to succeed Dr. John McPherson as president of the medical staff of *Athens General Hospital* in December. Other new officers are Dr. R. H. Randolph, vice-president, and Dr. Paul Keller, secretary-treasurer. The executive committee comprises Drs. Randolph, McPherson and J. B. Neighbors.

All officers of the staff of *Brunswick City Hospital* were re-elected in December. They are: Drs. J. B. Avera, president; Haywood Moore, vice-president, and C. A. Wilson, Jr., secretary-treasurer.

Dr. Henry Levington was elected president of the medical staff of the *Warren A. Candler Hospital* at its December meeting; he replaces Dr. T. A. Peterson. Dr. Harold Smith was named staff vice-president and Dr. R. B. Gottschalk secretary-treasurer.

Despite increased salary expenditures exceeding $6,300, the *Columbus City Hospital* went through the month of November with a surplus of more than $2,100, the hospital's board of managers was told at its December meeting by Dr. J. A. Thrash, executive director.

Presiding at the meeting was Acting Chairman Robert Dismukes, who was named to that office at a called meeting in November. Mr. Dismukes will serve until Columbus City Commission names a new board member to succeed the late William A. Fort, who was board chairman at the time of his death. After the commission acts, a permanent chairman will be chosen.

The new *Hall County Hospital* has been admitted to the registry of the American Medical Association, Administrator Nick Walters has been informed. A report made by the Hospital Authority in December to the county commissioners and covering the months of October and November showed that the new institution had a deficit of less than $1,700 for the two-month period. The report further showed that an average of 29 patients were in the hospital those two months for a total of 1,805 patient days and an average stay of 4.4 days each.

Macon Hospital in December attained a goal toward which it had been working for two years when it was approved by the American Medical Association as suitable for setting up a residency program in general practice. Dr. C. L. Ridley, superintendent, believes it to be the only hospital in Georgia thus approved.

Under its new program, said Dr. Ridley, interns coming to the hospital will be able to serve for two or three years as assistant residents or residents on rotating service and can train for general practice. Heretofore, interns, after working a year on a rotating basis, became residents under a program in which they devoted their time and study to the field in which they were planning to specialize.

Dr. Joseph Pacifici was named to succeed Dr. Barron Crawford, Jr., as president of the medical staff of *St. Joseph's Hospital,* Savannah, at the staff meeting in December. Other officers elected were: Drs. A. W. Coward, vice-president; William Barfield, secretary, and Alexander Paderewski, treasurer.

Dr. E. C. Bass, Jr., was elected president of the *Tanner Memorial Hospital* (Carrollton) medical staff, at the staff meeting early in December. He succeeded Dr. Steve Worthy, who had served as second president of the staff. Dr. D. S. Reese was the first, or charter, president.

Dr. O. E. Brannon, former head of the dental division, was elected vice-president, and Dr. R. L. Denney was re-elected secretary-treasurer. Departmental or divisional heads chosen were: Dr. T. E. Reeve, surgery; Dr. E. V. Patrick, medicine; Dr. Irving DeGaris, dental; Dr. Reese, eye, ear, nose and throat; Dr. Worthy, obstetrics; Dr. S. D. Thomas, medical advisory chairman for the colored ward.

Medical and other staff members of the *Terrell County Hospital,* Dawson, were entertained by the Hospital Authority at a Christmas party at Stevens' Lodge, near Graves, on December 17. After a turkey dinner, physicians and staff members were introduced and entertainment enjoyed.

On the postgraduate lecture series of the *Veterans Administration Hospital,* Dublin, the following speakers have recently given addresses on the following subjects: Nov. 20, Dr. Robert J. Rinker,

professor of urology, Medical College of Georgia, "Renal Tuberculosis"; Dec. 5, Dr. Richard Wilson, Atlanta, "Blood Cerebrospinal Fluid Barrier in Relations to Disorders of the Nervous System; Dec. 5, Dr. J. H. Sherman, professor of surgery, Medical College of Georgia, "Carcinoma of the Colon and Rectum"; Dec. 12, Dr. Robert G. Ellison, department of thoracic surgery, University Hospital, Augusta, "Significance of Bronchopulmonary Symptoms," and Dec. 14, Dr. W. C. Sealy, professor of surgery, Duke University School of Medicine, "Round Solitary Chest Lesions."

Dedicatory exercises for the *Winder-Barrow Hospital, of* Winder, were held on December 9, highlighted by an address by Governor Herman Talmadge. Judge George A. Johns, a member of the five-man Hospital Authority, served as master of ceremonies.

Other features of the program were: presentation of State Department of Public Health and Georgia Hospital Association guests, W. Dan Barker, hospital administrator; presentation of the medical staff, Dr. W. T. Randolph, president of the staff; presentation of prominent local and other guests, W. Clair Harris, chairman of the Hospital Authority; introduction of Governor Talmadge, Dr. Alex B. Russell, vice-president of the medical staff; invocation by Rev. J. O. McNeal; benediction by Rev. Emmitt Moore; music by the Winder High Band.

Other members of the hospital's attending medical staff, besides Drs. Randolph and Russell, are: Drs. Ed H. Etheridge, secretary; L. W. Moore, and W. Q. Randolph.

SCHOOLS

Dr. Richard S. Owings has accepted an appointment as assistant professor of pediatrics at the Medical College of Georgia, and Dr. Margaret Arlene Slusher has joined the staff of the department of endocrinology as research fellow.

Emory University Hospital is conducting its first school for medical records librarians. The course ebgan in September and will continue for a year. Graduates will receive a certificate in medical records library science from the hospital. Instruction is both theoretical and practical. Students rotate through several hospital departments, make field trips to Georgia hospitals of various sizes and types, and hear lectures periodically from qualified outside specialists.

Although the primary aim of the school is to train medical records librarians for the position of chief of the medical records libraries in hospitals, graduates will be qualified to accept employment in the medical statistical departments of large insurance companies, clinics, government hospitals and public health agencies.

A Symposium on Exfoliative Cytology, Cancer Detection and Diagnosis was held December 9-14 at the Medical College of Georgia. A concentrated program of teaching on the fundamentals of cancer, cytology and diagnostic procedures was provided, as well as facilities for microscopical and laboratory practice. Those who wished to devote their time entirely to the study of laboratory and clinical procedures and microscopic examination of slides remained at the school for a second week.

The symposium was presented under the direction of Dr. H. E. Nieburgs, head of the department of cytology, and staff. In addition to the faculty of the Medical College, 12 out-of-town guest lecturers participated.

BOOKS

PEPTIC ULCER: Clinical aspects, diagnosis, and management. Published by an editorial committee headed by Dr. David J. Sandweiss, appointed by and under the auspices of the American Gastroenterological Association. Philadelphia and London, W. B. Saunders Company, 1951.

This book represents a rather new and unique effort on the part of 77 authorities of a national association of specialists—the American Gastroenterological Association—to present the accepted and most recent ideas, both practcial and theoretical, concerning the common disorders of peptic ulceration. Despite the multiple authorship, every effort is made by the editors to prevent overlapping and repetition. The book is divided into several main sections, each section subdivided into individually authored chapters, and each chapter is well summarized; at the end, also, there is a good, complete index.

It is not a textbook but rather a book for reference, containing a great deal of basic physiology and much detailed reference and bibliography in support of individual ideas and theories; all of this would be necessary in discussion of such a controversial subject, but at the same time is leading to a lengthy, wordy book. If it were not for the summaries, to bog down in some of the theoretical discussions would be easy.

The early part of the book discusses the anatomy and physiology of the upper gastrointestinal tract with a rather technical outline of special physiological functions, such as that of the mucous barrier of the stomach, mechanisms of pain in peptic ulcer-

ation, and motility and evacuation of the stomach. Next, there is an exhaustive discussion of etiology and pathogenesis of peptic ulcer, including a chapter by Dr. Hans Selye on the General Adaptation Syndrome, probably one of the most important theorical contributions to this subject. The roles of the adrenal and pituitary hormones are touched upon, and some rationale of their actions in peptic ulceration is presented. The chapter by Dr. M. L. Grossman dealing with a critical analysis of the several theories of the cause of peptic ulceration is a refreshing departure from the usual, in that such discussion tends to unravel an otherwise confusing array of data. The discussion of the antacids and antispasmodics is frank, worthwhile attention being given to the fact several so-called antispasmodics are ineffective and useless.

At no time does one get the impression that there is partiality unless it be in the discussion of the operation vagotomy, but even this discussion is later clarified by the data accumulated by Dr. Sara Jordon in her chapter. Her conclusions on this controversial and waning procedure should be reviewed by every surgeon who operates upon the gastrointestinal tract.

The section on treatment, both medical and surgical, is also objective and impartial. Much reading is required to obtain the crux of the material, but it is probably worthwhile, since such new aspects as non-surgical treatment of perforation, radiation therapy of peptic ulcer, and sensible pros and cons of dietary care are discussed.

In toto, this is an excellent book, representing a great deal of effort by many eminent people on an important subject. It is an exhaustive work and one that is probably timely. For the person, both medical and surgical, who is interested in this field, it is a must. —J. H. Hilsman, M.D.

THE PRESS

Editors and Doctors

An interested follower of our little debate with the medical staff of Hall County's new hospital, titled: "Revolved that names of patients who have no objection to doing so should be able to get their names printed in the paper," sent along a clipping. He takes neither the affirmative nor the negative in this discussion and, probably, is the sort of fellow who has a side of his own and wouldn't go right down the road with anyone.

The debate revolves around disagreement in principle and reflects no personal ill-feelings on either side, so far as I know. Therefore, with the statement that some of my best friends are doctors, the following is presented for your amusement from Savannah Rotary's magazine by way of the Russell *Reporter* via the Marietta *Rotalight*:

Editors vs. Doctors

"I don't know how newspapers got into the world, and I don't think God does, for He never mentions them in the Bible. Maybe the editor was one of the Fallen Angels, for he seems to fall for about everything that people tell him. If the editor makes a mistake, folks say he ought to be hung, if a lawyer makes a mistake he appeals the case; when a doctor makes a mistake they say nothing 'cause they don't know Latin, and they couldn't read his writing if they did. An editor makes a mistake, there's a lot of hollering, cussing and a libel suit, while when the doctor makes one there's a funeral, with flowers and silence and perfect silence.

"A doctor can use a word a mile long and it won't make any difference if he knows what it means for folks will think he's educated, while an editor has to be able to spell any word he uses. If a doctor goes to see another man's wife he charges for the visit, while if the editor goes he gets shot. People that call the doctor and get well think he's a great man. If they don't get well they're dead and can't say anything. Two-thirds of the folks in town are sore at the editor either because the paper said something about them they didn't like or said something nice about somebody else." —Sylvan Meyer *in the* Gainesville Times

The Income of Doctors

The incomes of physicians in private practice for the year 1949 were examined jointly by the Department of Commerce and the American Medical Association.

It appears, from the report, that the average independent physician received $11,858. The specialist averaged more than $15,000, while the neurological surgeons led with more than $28,000.

Physicians with the lowest incomes are those who practice in communities with populations of 1,000 or less. Their average net income is about $6,000.

One of the nation's pressing needs in the field of medicine is more doctors in rural areas. In view of the fact that doctors in rural areas receive only about half as much as doctors who practice in the cities, it is easy to understand why young doctors, who still owe thousands of dollars for their medical education, tend to go to the big cities.

Another factor which must be considered, when we compare the city doctor with the country doctor, is the fact that city doctors often have hours, just like the rest of us, whereas country doctors are on call 24 hours a day.

As far as income and working conditions are concerned, the average community doctor is making real sacrifices. Fortunately, the people in most small communities realize and appreciate these sacrifices. —Winder News

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI FEBRUARY, 1952 NUMBER 2

Editorials

Methyl Alcohol POISONING

The legal and social aspects of Atlanta's epidemic of methyl alcohol poisoning have already received attention in newspapers and magazines. This issue of the *Journal* contains a report by four resident physicians at Grady Hospital describing the medical impact of this catastrophe. It is not difficult for us to visualize the task of caring for dozens of acutely and seriously ill persons under conditions of terror and panic. The importance of alkali in treatment had not been stressed in most textbooks of medicine; yet there can be no question that many lives were saved by the energetic administration of sodium bicarbonate by these young physicians. In addition to this, their clinical records were of such character as to constitute a real contribution to our knowledge of methyl alcohol poisoning. We congratulate them and their colleagues on a job well done.

ELECTROLYTES *in Medicine and Surgery*

Our internal environment or milieu is composed chiefly of water and electrolytes. Thus it is not surprising that half of the deaths on a large surgical service and about one-fourth of the deaths on a medical service are primarily or secondarily related to electrolyte anomalies. Possession by the physician of a few simple facts may prevent some of these fatalities. Recent work has so clarified the role of electrolytes in disease that practical management of patients has become much less difficult.

The fluid outside of the cells is composed chiefly of NaCl and water and comprises about 18 per cent of the body weight. As far as salt and water are concerned the blood vessel walls may be ignored, since the latter restrain only protein and blood cells. Excess accumulation of salt and water produces edema while severe losses of either salt or water result in a serious reduction in blood volume which presents itself clinically as shock.

Salt and Water Deficit. Salt deficiency may come about through excessive losses from the kidneys whose tubules ordinarily reabsorb 99 per cent of the salt and water which is filtered through their glomeruli. Reabsorption of only 98 per cent will double the urine volume and double the salt excretion. In Addison's disease or adrenal cortical deficiency the kidney fails to reabsorb salt properly. In certain types of renal damage the kidney tubules cannot respond to the adrenal and a similar picture to that of Addison's disease develops. In cerebral accidents occasionally the kidneys cannot conserve salt and shock develops. Usually the physician is forewarned of this by the development of a putty-like skin indicative of loss of extracellular fluid. But if the uncon-

scious or irrational patient continues to receive ample water without salt intravenously, salt without water depletion can occur and the patient may have shock without dehydration. Other types of central nervous disease such as meningitis and brain tumor may produce salt loss. Occasionally patients with chronic tuberculosis become salt losers even when the adrenals are not involved. Salt deficiency shock may follow extreme losses of salt and water through vomiting, Wangensteen suction, digestive tract fistulas or diarrhea. In workers who have not been acclimatized, exposure to severe heat may produce enough sweat loss to cause shock. If the sweat loss is replaced by water alone, the water cannot stay out of the cells without sufficient sodium and muscle cramps develop. If a patient has salt deficiency without water deficiency, the deficit should be made up with 6 per cent NaCl, not normal saline. This is true in the low salt syndrome produced in heart failure by excessive use of mercurial diuretics.

Potassium Retention. Potassium is the chief electrolyte within the cells where most of it is bound by unknown substances. Excesses of potassium in the body almost never develop in the presence of adequate kidney function including ample urinary output. There is a reciprocal relationship between sodium and potassium in the body. In adrenal insufficiency sodium is lost and potassium retained, resulting in an elevated blood potassium. The reverse is true with an overactive adrenal cortex such as one finds in all types of stress. Rapid cell disintegration releases large quantities of potassium into the extracellular fluid but it does not commonly reach a fatal level unless the kidneys or urine output are inadequate. The most common cause of potassium intoxication is renal shutdown. High intake of potassium salts, such as KI or KCl, can cause trouble if the kidney function is moderately restricted.

Treatment of Anuria or Oliguria. In oliguria or anuria as in lower nephron nephrosis, mercury poisoning or acute glomerulonephritis, the use of a few simple measures may keep the patient alive for several weeks until he begins to make urine again. Sodium salts and sodium-containing foods are scrupulously avoided except to *accurately* replace losses by vomiting, etc. No sodium is lost through the urine and added sodium is a menace to proper electrolyte balance. It also seems to encourage potassium to come out of cells, which can produce a fatally high potassium blood level. The EKG should be watched daily for high peaked T-waves indicative of potassium intoxication. If the latter occurs, intestinal lavage, peritoneal lavage, or enemas with a special potassium absorbing resin may be tried, as may glucose and insulin (to get potassium back into the cells). However, in most cases of potassium intoxication the artificial kidney will be needed and the patient should be moved at the first sign of it to a place where one is available. Water intake is limited to the amount lost through the lungs, kidneys, skin and other routes. The usual amount with complete anuria is 750 cc. per day in the absence of fever. Greater amounts waterlog the patient and eventuate in acute pulmonary edema. Cell breakdown and protein catabolism which release potassium and also produce acidosis are partially prevented by employing 20 per cent glucose in the infusion fluid. This provides sufficient calories for the body's energy needs. As the urine volume rises above 2,000 cc. daily during the recovery period, large amounts of salt may be lost. This must be replaced or the patient will die of salt depletion. On the other hand, if salt is not excreted, administration of salt will often cause the kidneys to shut down again. Thus after the urine volume rises and as the specific gravity increases, the physician must begin to measure the urine chloride and replace the salt which is lost. On the other hand, if no chloride is excreted, salt must be avoided.

Potassium Deficiency. Potassium depletion usually produces confusion, delirium, coma or profound weakness. It occurs most frequently in subjects of stress (postoperative patients, febrile patients) who in addition are losing digestive juices through vomiting, diarrhea, suction or fistula. Most infusions contain no potassium and large quantities of potassium are lost in the urine because of adrenal cortical stimulation. Severe diarrheal losses can also produce potassium depletion, especially when added to the increased urine losses produced by the stress of a gastroenteritis.

Perhaps the next most common cause of potassium depletion is severe acidosis especially diabetic acidosis. After a certain amount of sodium reserve is used up, the body draws on potassium. Since even larger amounts of water than of potassium are lost, the potassium blood level may be high and the EKG may indicate hyperpotassemia when the body stores within the cells are actually seriously depleted. Both EKG and blood chemistry reflect the exhaustion of potassium stores as the patient becomes hydrated. Potassium should not be given until the patient is partly hydrated, as raising the already high blood concentration may be lethal.

Potassium depletion instead of potassium retention may occur in renal insufficiency and may be mislabelled psychasthenia.

Ordinarily we do not give potassium without an adequate urine flow. However, it may occasionally be necessary in cases in which the oliguria is apparently due to potassium depletion as in postoperative stress. In these cases it should be used with great caution and electrocardiographic tracings should be made frequently for evidences of potassium intoxication.

Recognition of electrolyte problems simply requires a knowledge of their existence and the situations which bring them on. Once they are recognized the patient can be treated cautiously where he is or taken to a place where adequate laboratory control can be obtained. Since the advent of antibiotics, this group represents a large proportion of all preventable deaths, and we must attack these problems vigorously. —A. J. Merrill, M.D.

VI. Our TWENTY-FIVE Dollars

WHERE THE MONEY COMES FROM
(1951 figures)

DUES			
Membership	$25	$3,310,000	
(Including Journal of the AMA subscription)			
Fellowship	$5	125,500	$3,435,500
			38%
SUBSCRIPTIONS			
Journal of the AMA (to non-members)		500,000	
Special Journals		515,000	
Today's Health		430,000	
Reprints and other Publications		267,000	1,712,000
			19%
ADVERTISING			
Journal of the AMA		2,430,000	
Special Journals		91,000	
Today's Health		175,000	2,696,000
			30%
STATE JOURNAL ADVERTISING BUREAU		651,000	651,000
			7%
TECHNICAL EXHIBITS			
Annual and Clinical		258,000	258,000
			3%
MISCELLANEOUS			
Investments		170,000	
Other Receipts		85,000	255,000
			3%
Total income			$9,007,860

WHERE THE MONEY GOES
(1951 figures)

SCIENTIFIC ACTIVITIES	
Publications, Council on Pharmacy and Chemistry, Annual and Clinical Meetings, Medical Exhibits and Films, Library, Council on Medical Education and Hospitals, Council on Industrial Health	$4,334,471
	54%
SOCIO-ECONOMIC ACTIVITIES	
Council on Medical Service, Bureau of Medical Economic Research, Rural Health, National Emergency Medical Service, Commission on Chronic Illness (grant)	418,469
	5%
PUBLIC INFORMATION	
National Education Campaign, Public Relations, Health Education, Today's Health, Public Exhibits, Bureau of Investigation, Biographical Records	1,855,883
	23%
LEGISLATIVE	
Washington Office, Bureau of Legal Medicine, Committee on Legislation	259,567
	3%
ADMINISTRATIVE	
Membership, General Administration, Employees Annuities and Retirement, Miscellaneous	584,726
	7%
STATE JOURNAL ADVERTISING	
Returned to State Medical Association Journals	651,000
	8%
Total outgo	$8,104,116

GENERAL SUMMARY

We must all hang together or, assuredly, we shall hang separately."

These words, applied to the medical profession, are as true today as when they were uttered by Franklin in colonial times. No one can subsist by himself alone nor can a physician subsist by himself without the benefits of his fellow physicians.

This series of articles has been written to acquaint doctors with the benefits, the aims, and the policies of the AMA. As has been said, the AMA is an organization, governed by elected representatives of organized medicine. It represents 130,000 physician members, 1987 component county and district medical societies, and 53 constituent state and territorial associations. Truly it can be said that the AMA represents the American medical profession. *Are you counted among these members?* It represents the voice of the medical profession. It is the only organization which can properly represent the opinions and interests of the physicians of America. It is the focal point of health education and medical care.

In any large organization founded on democratic principles, all functions and decisions seldom satisfy all constituents. Policies will often be at variance with local groups and individuals. The AMA policies and decisions are the opinions of the majority of members. The House of Delegates, 201 strong, formulates these policies and one must not think for a moment that there are no differences of opinion therein.

Organized medicine has a vast amount of work to be done and the passing years have not eased its task or reduced its responsibility. In fact, it has doubled its duty to the public. The duty of the physi-

cian is two-fold—to be a good doctor and a better citizen. Neither can be neglected. Rapid social and economic changes alter medical care. The physicians of America are the most favored of any in the world. They have individual liberty; well organized, up-to-date hospitals to work in; standard therapeutic agents; high grade medical education; protective laws governing the practice of medicine; health laws; high standards of living; and, above all, the confidence of the public. Most of these privileges to be enjoyed have been the result of the work of the AMA. The practice of medicine and medical care is so complex and has so many ramifications that it is absolutely necssary to have a national organization to coordinate such activities. Without such organization, the practice of medicine would soon revert to quackery, pestilence, and low-standard medical care. If doctors desire medical progress to continue in this country, they must show a united front. Changing times produce changing order and require close observation, sound thinking and cooperation on the part of every physician.

The AMA has never been stronger than it is today. The medical profession has never opposed or supported any legislative program except in the interest of the health of the people. The AMA can point with pride to the fact that Congress has never enacted any major legislation opposed by this organization.

Support your AMA as it has supported you. Get behind organized medicine and it will continue to back you up. Know your AMA and let it know you. "United we stand, divided we fall." Let's continue to keep human freedom first and continue to hold the line for the American way of life.

—Eustace A. Allen, M.D.

The Barnesville MATERNITY SHELTER: A STEP *in the Right Direction*

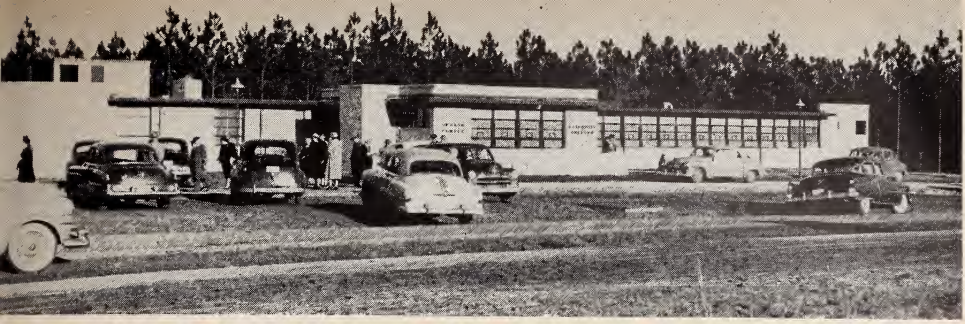
How best to provide the small community with adequate hospital facilities, that will attract good general practitioners and specialists alike to insure acceptable medical care, and still stay within the financial capabilities of the population, is a problem that has confronted everyone involved. The small hospital with less than 25 beds has proved itself in repeated instances not to be the correct answer because of the high costs of operation, the difficulty of obtaining nurses, administrators, and other trained personnel, the low occupancy rate after many months of operation, and the failure to secure more specialists, especially those trained in hospital residencies to perform major surgery. Added to these is the secondary influence of such small institutions upon the larger regional hospitals in an area, whereby decreased use of the latter increases its difficulty in keeping its head above water.

One solution for this problem has been the development of community health centers with only four to eight beds for obstetrical, accident and minor surgical patients, which are kept open only as needed. No facilities are provided for major surgery. Such an institution does not have the complicated administrator problems and high operational costs of a hospital which must keep its doors open 24 hours of every day, regardless of whether patients are on hand or not.

The new Maternity Shelter which opened its doors on December 16 is certainly a step in the right direction even though this plant is much more elaborate, than what would be considered necessary in most communities. Twelve beds are available for obstetric patients only, who may be private patients, who pay a nominal fee for the use of the delivery room and per diem, or charity patients referred by the Lamar County Welfare Department. At least two trained nurse-midwives are on duty at all times to take care of the latter patients with physicians on call as needed. The two adjoining counties also participate in its operation, helping to defray operation costs jointly. Accident cases may be admitted for temporary treatment before transfer to one of several nearby regional hospitals. There are no facilities for major surgical procedures, and even for minor cases, the physicians provides his own instruments and assistants.

Another desirable feature of the Barnesville set-up is the joint housing with all the offices of the Public Health Departments of the three counties in one building. This makes the Shelter the center of health activities in the community, including pre- and post-natal clinics, dental care, sanitation and diet control.

The Medical Association of Georgia sees this project as a definite step in the right direction and wishes to call it to the attention of all small communities seeking to improve its health facilities and medical care. We wish it every success.



FRONT VIEW OF THE NEW CENTER, TAKEN ON DEDICATION DAY

THE BARNESVILLE CENTER







These photographs were taken when the Barnesville Health Center and Maternity Shelter was dedicated on December 16. Among those who may be seen in the pictures are: Governor Herman Talmadge, who addressed the gathering; Dr. John H. Venable, commissioner of health for Spalding, Pike and Lamar Counties; Dr. T. F. Sellers, director of the State Department of Public Health, and Dr. John Corry, of Barnesville, dean of the medical profession in his area, whose photograph hangs in a hallway of the new Center. Governor Talmadge spoke in the chapel of Gordon Military College. (*Editorial opposite.*)

Visitors inspect a "customer"



Top: Governor Talmadge and Dr. Venable
Middle: Dr. Corry and his photograph
Bottom: Drs. Venable, Corry and Sellers hear governor speak

More About the GEORGIA PLAN

Thanks, Doctor, for the personal support you have given *The Georgia Plan.*

The fact that you and your other hometown colleagues have so willingly agreed to participate in *The Georgia Plan* accounts for the fact that nearly 85 per cent of this Association's active membership today is rendering invaluable service to the public in furthering the availability of adequate, low-cost prepayment surgical-obstetrical insurance.

In a measure, your cooperation has helped to deflect the drift toward passage of compulsory health insurance legislation, so dangerously obvious during the past few years.

But a commanding job yet remains to be done in behalf of *The Georgia Plan* and it's going to require your helping hand to accomplish it.

In short, public awareness of *The Georgia Plan* and of its availability in the state, through the 26 commercial insurance underwriters now selling it, is badly in need of stimulation. It needs "talking-up" to your patients, to your friends, among members of your civic club and church congregation.

As a respected physician in your community, you are in an excellent position to intensify awareness of its benefits and to convince people that *The Georgia Plan* has got what they need in these days of spiraling medical costs and at a price they can afford to pay.

We'll be among the first to admit that *The Georgia Plan* is not without "kinks" at present, all of which are conducive to headaches of a sort. However, rest assured that the Association's Insurance and Economics Committee is aware of them even moreso, yet confidently is undertaking the task of ironing them out as rapidly as plausible. The "kink" situation, after all, hardly can be considered beyond control when you realize that *The Georgia Plan* has yet to celebrate the first anniversary of its actual launching.

It need not be added that those 26 participating commercial underwriters deserve a good, friendly pat on the back for their cooperation with the Association in its effort to give people in the state an adequate prepayment plan, carrying the unanimous endorsement of its members. Your February issue of the *PR News Letter* carries a complete listing of these companies and it is suggested that you refer to it carefully.

On page 64 in this issue of THE JOURNAL, Dr. W. S. Dorough of Atlanta, Chairman of the Committee on Insurance and Economics, succinctly sums-up the objectives and potentialities of *"The Georgia Plan."* A more lucid explanation would be difficult to find elsewhere.

AMA DUES *for 1952*

It's an unfortunate fact that a member's decision as to pay or not to pay his 1952 membership dues in the American Medical Association now vitally affects the Medical Association of Georgia.

Our Association's representation in the AMA House of Delegates is now contingent on the number of AMA dues-paying members in our ranks, apportionment of which is one AMA delegate for each thousand *active* AMA members or fraction thereof. Lack of enthusiasm among our members toward the 1951 AMA membership dues already has cost this Association the representation of one AMA delegate . . . thus, sizably reducing our voting strength on national medical affairs of importance.

To clarify the existing picture, the higher echelons in Chicago have issued a number of rulings pertaining to payment of the 1952 AMA membership dues, and your careful attention is directed to them:

1. AMA dues for 1952 remain at $25.
2. Fellowship dues have been abolished for 1952.
3. Members having attained the age of 70, *upon written application to our headquarters office,* may be excused from payment of AMA membership dues. Such exemption status, however, will *not* entitle the member to the automatic subscription to *The Journal of the American Medical Association,* now afforded dues-paying members.
4. Paid-up AMA members may now receive either *The Journal of the American Medical Association* or one of the specialty journals published by AMA on request, a privilege previously extended only to Fellows.
5. Members either entering or being discharged from the armed forces during the year will be liable for payment of only half the regular $25 dues.
6. Any member desiring to reinstate his AMA membership status, having been dropped by AMA in 1951 for nonpayment of 1950 dues, will be liable *only* for the delinquent 1950 dues of $25 and the current 1952 AMA dues. Payment of the 1951 AMA dues is *not* required.

PHILIP THOREK, M.D., Chicago, Ill.

The ACUTE ABDOMEN

The subject of the acute abdomen will always present an interesting challenge to the practitioner and surgeon alike. I have examined charts from the surgical services at the Cook County Hospital for a period of fourteen years, the purpose being to determine which diseases are most frequently mistaken in the acute abdomen. To my surprise I did not find fifty or seventy-five conditions which confuse us, but rather six outstanding ones that we mistake most frequently. These six conditions are:

1. Acute Appendicitis
2. Acute Cholecystitis
3. Perforated Peptic Ulcer
4. Acute Hemorrhagic Pancreatitis
5. Renal Colics
6. Coronary Disease

There is a seventh disease which deserves special consideration, namely, salpingitis. Acute or chronic salpingeal pathology is frequently associated with a perihepatitis which produces pain in the right upper quadrant (pseudo-gallbladder pain). Because of this, gallbladder explorations and other surgical procedures have been done in cases of salpingitis, resulting in danger to the patient and embarrassment to the surgeon.

To make a diagnosis one must have a simple and workable plan in mind. Our plan consists of four headings, namely, history, present symptom complex, physical examination and laboratory data. This routine has served us well and we utilize it daily.

*From the Departments of Surgery, University of Illinois, Cook County Graduate School of Medicine, Cook County Hospital, American and Alexian Brothers' Hospitals, Chicago.

Presented at the Georgia Academy of General Practice Meeting, Macon, Oct. 25, 1951.

ACUTE APPENDICITIS

The more one sees of acute appendicitis, the more one respects the condition. The statement "only an appendix" is indeed a dangerous one. This condition is most frequently found in individuals under the age of forty and is somewhat more common in males. It will be recalled that gallbladder conditions appear most frequently after the age of forty. The story the patient relates is usually quite stereotyped. To put it in his language: "Something I ate gave me a belly-ache." This is his way of describing acute epigastric distress. When he gets his "belly-ache" he often attempts to obtain relief with either a cathartic or an enema. Within the first twenty-four hours his "belly-ache" becomes a soreness low on the right side. His acute epigastric distress has become localized to the right lower quadrant. The "two-question test" is both useful and time-saving. Question Number 1: "Where was your pain when it started?"; to this interrogation the patient points to his entire abdomen. Question Number 2: "Where does it hurt you now?"; he then points to the right lower quadrant, usually McBurney's point. This simple method of having the patient demonstrate diffuse pain which localizes to the right lower quadrant will diagnose the vast majority of cases of acute appendicitis.

Nausea and vomiting have been impressed upon us as being associated with appendicitis. This is the exception and not the rule. Anorexia, or loss of appetite, is more constant and more important than either nausea or vomiting. Anorexia, nausea, and vomiting are three degrees of one symptom; anorexia is the mildest form and is associated with mild distention of the appendix; nausea the middle degree, is due to moderate distention; and vomiting, the maximum degree, is found in greatly distended appendices. The most common symptom in acute

appendicitis is anorexia, and if the patient states that his appetite is not altered we doubt the diagnosis of an acute appendix. Two complaints which are extremely rare in acute appendicitis are diarrhea and chills. These are probably found in less than one per cent of the cases. Constipation is the rule.

Fever is not an early finding in acute appendicitis; in fact, if present it is suggestive of peritoneal soiling. It is true that cases of acute appendicitis may have a fever of 102°, or 103°, but these are no longer cases of appendicitis; they are cases of far advanced peritonitis. Children prove the exception to this rule. If appendices could be operated upon when the temperature is below 99° the mortality would be very low.

Acute appendicitis does *not* give right rectus rigidity. Although the reverse is taught in many schools and text books, this point should be clarified. It is impossible for an individual to contract his right rectus muscle without contracting the left; therefore, when pressure is made upon an inflamed area, both rectus muscles contract. When only one rectus is rigid it suggests an underlying mass, such as a tumor or abscess. When both recti contract to pressure it should be considered "muscular defense" rather than right or left rectus rigidity. The importance of this bears emphasis when we realize that diagnosis, treatment and prognosis may depend upon the presence of right rectus rigidity or simple muscular defense.

The iliopsoas and obturator signs are not signs which diagnose acute appendicitis, but rather locate an acute appendix. Probably a misconception has arisen because these signs are usually discussed under the heading of acute appendicitis; they may, however, be produced in other diseases. The right iliopsoas sign is elicited by placing the patient on his left side and hyper-extending the right leg. If positive, pain is produced over the iliopsoas fascia which will be manifested in the region of the right lower quadrant. In the presence of a history of acute appendicitis this would signify that the inflamed appendix is overlying the iliopsoas fascia and is retrocecal. A positive obturator sign will locate an inflamed pelvic appendix. It is conducted in the following way; with the patient on his back the thigh is flexed upon the abdomen and the leg upon the thigh; the leg is then abducted. This causes internal rotation of the thigh and stretches the obturator internus muscle. If this produces pain it is diagnostic of a fasciitis involving the obturator fascia, which could be an inflamed tube, appendix, ovarian cyst, etc. If the patient elicits a history of acute appendicitis with a positive obturator sign, we conclude that the appendix is low-lying and in the pelvis. Rovsing's sign is also helpful. It is elicited by pressing over the cecum, the colonic gas which has been pushed to the right will produce pain over the cecal region; this is quite diagnostic of acute appendicitis.

Routine bi-digital examinations are done; at times an acute appendix or appendiceal mass may be felt. Late and neglected appendices may produce a pelvic abscess which points rectally or vaginally, and this examination reveals the proper site and time for incision and drainage.

The laboratory data usually consist of a white blood count and a urinalysis. More important than the white blood count or urinalysis is a differential blood count; this is easy to do and is more accurate. If the "poly" count is high, it is assumed that an acute infectious process is present; a high "poly" count in the presence of a low white count means a poor prognosis. The urinalysis is usually negative but may be misleading; a few red cells in the urine are not pathognomonic of renal pathology. Negative urinalysis have been recorded where a renal stone completely blocks the ureter so that no blood or pus can pass into the bladder.

The reason for the high mortality in acute appendicitis can be summarized in the alliteration utilizing the three "P's", namely, purgation, procrastination and poor surgical judgment.

ACUTE CHOLECYSTITIS

The dictum that certain types of people are predisposed to certain types of diseases seems to be correct. The gallbladder type is described as fair, fat and forty, usually being a female in the latter third or fourth decade and somewhat obese. There is always an exception to the rule, hence, the most fulminating hydrops of the gallbladder on our service was seen in a young, thin boy of sixteen. The age of forty is related to a previous history of pregnancy, and this is theoretically explained in the following way: the average female has her children in the second decade of life and while pregnant she develops a physiologic hypercholesterolemia. Some of this cholesterol deposits on the mucous membrane of the gallbladder, forms polypi which break off and become the nuclei for stones. It may take from ten to twenty years for gallstones to attain any appreciable size, so that by the time she reaches her fourth decade the stone is large enough to obstruct or irritate. Nulliparous women can also have gallstones or gallbladder disease, but this too, is the exception and not the rule.

The history of recurrent attacks of abdominal pain in a middle aged female, so severe that the physician must administer a sedative, is an acute gallbladder until proved otherwise. Acute appendicitis does not require morphine; renal colics will be differentiated presently, and coronary occlusion is rare in the female. One of the most unusual lesions noted in the female is a perforated peptic ulcer. The gallbladder patient also presents a previous history of "selective dyspepsia." By this we mean that there are certain specific foods that she cannot tolerate. There are four primary offenders to these foods: they are fried and fatty foods, raw apples, cucumbers and cabbage. The patient does not use the term "dyspepsia," but describes this distress as the two "B's": namely, bloating and belching. To summarize and describe the gallbladder patient, one may again use an alliteration and state that she is the patient with the seven "F's": she is the fair, fat, fertile, flatulent, flabby, female of forty.

The complaint is one of pain, and it is important to determine the type of pain which is present. A constant pain is due to edema, but colicky pain is caused by obstruction. This is one of the factors which indicate whether the case should be treated conservatively or surgically. It is unwise to treat an obstructed lesion conservatively since these are cases which result in early gangrene and perforation. Morphine should not be used in gallbladder disease because it is a smooth muscle contractor, and since the gallbladder is a smooth muscle organ one should not administer a medicament which would stimulate its activity. By increasing muscle tonus, morphine may actually aggravate or provoke gallbladder pain and colic. One should not state, however, that the drug must never be used in gallbladder disease since it still has its place, namely, to prevent shock. These patients are treated first with nitrite therapy. One breaks an amyl nitrite bead and lets the patient inhale the vapors; 1/100th grain of nitroglycerin is placed under the tongue, and 3 grains of sodium amytal or any other barbiturate is given by mouth. If this gives no relief we administer a hypodermic which consists of 100 mg. of demerol and 1/100th of a grain of nitroglycerin. Should these measures fail, antispasmodic therapy with such drugs as papaverine, aminophylline, et cetera, is tried. Morphine is used only after all other measures have failed.

Gallbladder pain is usually located under the right costal margin, but may be referred to the stomach since these two organs originate from the same embryologic segment. The stomach responds to this stimulus in one of three types of gastric spasms: (1) pylorospasm, (2) midgastric spasm and (3) cardiospasm. If a pylorospasm is produced the gallbladder condition might be confused with peptic ulcer; if midgastric spasm results, a stomach carcinoma may be erroneously diagnosed, and if associated with cardiospasm, the pain appears on the left (pseudo-coronary pain) and coronary disease may incorrectly project itself into the diagnostic picture.

Referred pain should not be confused with radiation of pain. By radiation we mean that gallbladder pain, located under the right costal margin, may radiate along the path of the seventh intercostal nerve to the inferior angle of the right scapula, or the interscapular region. Gall bladder pain, therefore, cannot radiate to the right shoulder. Shoulder pain is an entirely different mechanism which involves the phrenic nerve and is indicative of peritonitis. When a gallbladder patient has true shoulder pain a diagnosis of gangrenous or ruptured gallbladder with biliary peritonitis should be made.

Temperature, pulse and respirations are included under the heading of physical examination. The patient with acute cholecystitis has high fever early, hence, a temperature of 102° is not unusual within the first twelve to twenty-four hours of the disease. The early fever is explained by the absence of a submucosa. Since this tough resisting layer is lacking, there is greater chance for early contamination and absorption in the peritoneal cavity. The patient has a pulse which is increased according to the temperature, therefore, for every degree rise in fever there will be approximately a ten beat increase in pulse rate. Respirations are slightly increased because breathing is painful. This is due to the fact that the inflamed gallbladder rubs against the sensitive parietal peritoneum; because of this, acute gallbladder disease may be confused with pneumonia or pleurisy.

Although pain, a symptom, may be referred anywhere along its nervous path, tenderness, a physical finding, remains at the site of pathology. This is an excellent diagnostic rule having few if any exceptions. The tenderness of gallbladder disease will be located in the region of the right costal margin. If it is most marked on a level with the umbilicus, it may be difficult to determine whether the condition is an inflamed, low-lying gallbladder or an acute high-lying retrocecal appendix. Two ways aid in the differentiation of these two conditions. First, we recall that the normal abdomen reveals a tympanitic note to percussion in all four quadrants. If the tenderness opposite the umbilicus is due to an inflamed gallbladder, we assume that the organ is unusually large or that a ptotic liver with an inflamed gallbladder at its free border is present. This would cause an obliteration of the normal tympany in the right upper quadrant and in its place the percussion note would be one of dullness or flatness. If the patient presents tenderness on the level with the umbilicus and retains normal tympany in the right upper quadrant, this would point to a high-lying retrocecal appendix. Another method of differentiating the gallbladder and appendix is by means of Ligat's test. This test locates areas of hyperesthesia over an inflamed organ. If the tenderness is due to gallbladder disease, an area of hyperesthesia (elicited by picking up the skin and letting it drop) is present from the umbilicus upward to the right costal margin. If the tenderness is due to an acute appendix, the area of hyperesthesia will be found from the umbilicus down to Poupart's ligament.

A rectal examination is done as a routine in every physical examination. More important than the rectal or vaginal examination is a so-called bi-digital, which is conducted by placing the index finger in the vagina and the middle finger in the rectum with the perineum in between. This will immediately orient the examiner and adnexal pathology will be revealed.

A flat x-ray film should be taken in every acute abdominal condition. One may determine whether a calcified gallbladder or visible stones are present. It also gives an indication as to whether or not the liver is enlarged or ptotic. Routine laboratory tests are done.

PERFORATED PEPTIC ULCER

This condition is rare in females. Usually a previous history of peptic ulcer or hemorrhage can be obtained, but the onset may be with perforation.

The patient states that he was seized with a sudden pain, usually after eating; this was so

severe that it doubled him up. The classical picture of perforated peptic ulcer with board-like rigidity and a shock-like syndrome is too well known to bear repitition. Two signs which should be sought for in every case, however, are: (1) the finding with auscultation and (2) the presence of a pneumoperitoneum. Auscultation reveals an absolutely silent abdomen when an ulcer perforates, leaks, and soils the peritoneal cavity. This is not new, since the late J. B. Murphy stressed the importance of this finding many decades ago. When intestinal sounds are present, the diagnosis of perforated peptic ulcer is remote. There are exceptions, and one of these will be discussed presently under the subject of forme fruste ulcer. The next sign which helps clinch the diagnosis is the demonstration of a spontaneous pneumoperitoneum. Normally a stomach air bubble is present. When an ulcer perforates, this air bubble escapes into the general peritoneal cavity, and can be demonstrated either by percussion or with the fluoroscope; the latter is by far the more accurate. The patient is placed on his left side so that the free air bubble may gravitate upward between the liver and the right hemidiaphragm. Normally, the liver hugs the diaphragm and no air space is visible between them. If this air is of an appreciable amount, normal liver dullness is obliterated and in its place a tympanitic note is produced by percussion. The sign is easy to demonstrate, quite pathognomonic of perforted peptic ulcer, and present in about seventy per cent of all cases.

The forme fruste ulcer deserves special mention. The term refers to a pin-point perforation in the stomach or duodenum which is immediately sealed over by muscular contraction or by the overlying liver. Therefore, the spillage is minimal and the amount of peritoneal soiling is small. Such patients may experience a sudden sharp pain in the epigastrium, but the typical physical findings are lacking. This patient may be able to straighten up and walk about. Abdominal sounds are usually present and the air bubble may remain intragastric, having had no chance to leave the small perforation. These patients, therefore, present a misleading picture and have been misdiagnosed. However, with the ingestion of their next meal they usually reperforate and then present the typical findings.

The temperature, pulse and respirations will depend upon whether or not shock is present. Most perforated peptic ulcers present a shock-like picture which varies in its intensity. The shock associated with peforated ulcer responds rapidly to therapy. Within a few hours, the classical picture of peritonitis develops with the associated increase in temperature, pulse and respiratory rate.

The contents from a perforated ulcer may pass downward along the so-called "paracolic gutter of Moynihan," pool around the appendix and produce exquisite tenderness at McBurney's point. The diagnostician must then be on his guard, since such a history would suggest an epigastric distress with localization to the right lower quadrant which could be confused with an acute appendix. Upon exploratory operation, free fluid will be found in the peritoneal cavity with all signs of a peritonitis, and a red and injected appendix seen and removed. These patients usually die if the leaking ulcer is overlooked. This catastrophe can be avoided if, before closing the abdomen, the appendix is opened and the mucous membrane examined. Since acute appendicitis starts in the lumen of the appendix and travels outward, a normal appearing mucous membrane would suggest looking elsewhere for the cause of the peritonitis.

Laboratory data include the flat x-ray film which has been discussed under the subject of spontaneous pneumoperitoneum. Routine blood count and urinalysis are done. Some of these patients might have bled, and although perforated ulcers are known not to produce massive hemorrhage, signs of a secondary anemia may be present.

ACUTE HEMORRHAGIC PANCREATITIS

It is important to recall that this disease may appear in one or two forms; either acute edematous pancreatitis or hemorrhagic pancreatitis. The former presents a mild clinical picture, but the latter which is associated with fat necrosis and occasionally a hemorrhagic peritonitis produces a fulminating one. The acute edematous form usually improves rapidly without therapy within 48 hours, but hemorrhagic pancreatitis gets progressively worse and often requires surgical intervention. It is the hemorrhagic type, therefore, which is important to identify and treat promptly.

Although the etiology of pancreatitis is unknown, there seems to be a mechanical factor which is associated with spasm, stones, swelling and stasis. Recent work seems to emphasize the relationship between acute pancreatitis and acute cholecystitis. This seems to be due to a common factor which is an obstruction distal to the junction of the pancreatic and common bile ducts converting them into a "common channel". An actual reflux of pancreatic juices into the gallbladder during an attack of acute pancreatitis has been shown. The patient who develops acute pancreatitis is usually of the same type that develops gallbladder disease, therefore, the condition is more common in females, rarely occurring before the age of forty, and is seen in stout people. The ratio of colored to white is 1 to 50. The attack usually follows the ingestion of a heavy meal. The pain is dramatic, sudden and excruciating; it is felt in the epigastrium, and radiates into one or both loins. In this way pancreatic pain radiation resembles an inverted fan. When the patient sits up or lies on his abdomen, the pain is relieved, and is aggravated when he is on his back. Hence, in most pancreatic conditions, be they tumors or inflammations, the patient is usually found lying on his abdomen or in a sitting position. Reflex vomiting or retching almost always occurs; emesis which is truly reflex in nature is never feculent.

Physical examination reveals a patient who is usually in shock with cold and clammy extremities, subnormal temperature, and rapid, thready pulse. Local epigastric tenderness is almost always

present and is associated with a type of muscular defense which is localized to the same area. The rigidity is not truly board-like in nature, and the tenderness is most marked midway between the umbilicus and the xiphoid. An occasional finding is ecchymosis in one or both loins, or at times around the umbilicus. This is due to extravasated blood which finds its way around the retroperitoneal space and presents itself as greenish yellow or purplish discolorations. This finding, however, takes two or three days to appear. Mild jaundice is present in about half of the cases; this is explained by the fact that the common duct is pressed upon by a swollen head of the pancreas. Abdominal auscultation usually reveals a quiet but not silent abdomen.

Laboratory findings may be helpful in the diagnosis. An increase of serum amylase is specific in the acute phase, although a normal reading does not rule out acute pancreatitis. Polowe has emphasized the importance of determining the blood amylase activity in terms of cuprous oxide precipitation. He has shown that moderate to marked blood amylase activity is almost always associated with disease of the pancreas, and normal or decreased blood amylase almost always excludes pancreatitis. Hypocalcemia is usually present and the level found is usually below nine. A flat x-ray film of the abdomen may reveal a separation of the upper and lower limbs of the duodenum brought about by an edema of the head of the pancreas. This latter finding is unsual.

RENAL COLIC

Stones are not the only substance which produce renal colic, since the same syndrome may be produced by a small blood clot, inspissated pus, uratic debris, or a kinking of the ureteropelvic junction in a ptotic kidney.

The condition is more common in males, and the patient may reveal a history of previous attacks, a hereditary influence, a story of gout, or parathyroid pathology.

The patient complains of a sudden pain which starts in the lumbar region and radiates to the testicle, vulva or the inner aspect of the thigh. With this pain he becomes extremely restless and thrashes about. A patient who is experiencing a colic is restless and moves about, but one who has a peritonitis lies perfectly quiet and resents being moved. Vomiting is a common symptom, as it a frequency of urination. During the act of micturition the pain may be altered.

Physical examination rarely reveals any elevation in temperature, but extremely characteristic of the condition is a bradycardia. It has ofttimes been stated that when a patient with an acute abdomen has "a clean tongue and slow pulse" he has a renal colic until proved otherwise. Tenderness is most marked in the region of the twelfth rib of the involved side, and to elicit this finding it is unnecessary and cruel to utilize any type of "punch" test. The tenderness is so exquisite that mild percussion will demonstrate it. We prefer to use the term "Murphy tap" to "Murphy punch". A zone of hyperesthesia is usually found posteriorly at the level of and slightly below the twelfth rib. If this area is anesthetized with novocain, the hyperesthesia and pain disappear.

A flat x-ray film may reveal a stone if such is present, but this is not reliable since non-opaque substances may also produce kidney colic. An intravenous pyelogram can be made without disturbing the patient, and if necessary, the films can be taken at the bedside with the aid of a stationary grid. The significant finding for a diagnosis of a stone in the ureter is the anuria which may be present on the affected side; the opposite side shows normal excretion. The kidney on the affected side usually appears increased in density since the dye in these tubules is more concentrated. This finding is sufficient for diagnosis of non-opaque stones in the ureter. A catheterized specimen of urine usually reveals pus, blood and albumin. The presence or absence of pus and blood in the urine is not pathognomonic since a stone may completely block the ureter and result in a normal urine. On the other hand, an inflamed appendix may be attached to the ureter, kidney or bladder, resulting in a secondary ureteritis, nephritis or cystitis with an associated hematuria. In such instances the laboratory report may actually be misleading.

CORONARY DISEASE

Although this belongs to the realm of the internist, the general practitioner as well as the surgeon must be on his guard to avoid the fatal error of confusing an acute coronary disease with an acute abdominal condition.

Men are most susceptible to coronary disease, and it is found usually in those past the age of forty. A previous history of dyspnea or pain in the chest during exertion or excitement may be elicited. The attack is sudden, with severe pain in the chest which radiates out the left arm toward the abdomen or both shoulders. There is a sense of impending death with severe fright which usually supersedes the complaint of pain. The radiation may also be toward the epigastrium, so that the examiner's attention is directed to the abdomen rather than the chest. A usual complaint during such an attack is one of "indigestion." Although the pain of acute coronary disease may occur in the abdomen, it does not become localized, hence, no area of local abdominal tenderness is ever found. Marked abdominal distention may be present in coronary pathology, but muscle defense or rectus rigidity are lacking. In abdominal catastrophes the patient lies perfectly quiet, but the coronary patient resembles the colic in that he is restless and tosses about. The acute cardiac patient presents veins in the neck which are distended and full, in contrast to the patient with the surgical abdomen who may appear pale and bloodless. Signs of impaired circulation are usually present, such as dyspnea, orthopnea, and cyanosis. Auscultation will usually reveal rales in both bases due to pulmonary congestion. Cardiac enlargement, feeble heart sounds

and occasionally a pericardial friction rub may be found. During auscultation of the abdomen, normal intestinal sounds will be heard which are absent or diminished in cases of spreading peritonitis.

It should also be emphasized that a distinction should be made between acute coronary occlusion and acute coronary insufficiency. Acute coronary insufficiency presents itself as an episode of angina pectoris varying from simple transitory chest pain on pressure to severe pain or collapse. It is usually relieved by glyceryl-trinitrate. Coronary occlusion is the complete closure of an artery and is not influenced or precipitated by external environment factors. It is not relieved by glyceryl-trinitrate, which may even aggravate it.

Positive electrocardiographic findings are pathognomonic, but one is not always fortunate enough to have an electrocardiogram handy. A leukocytosis may be present some hours after the disease takes place, and the urine is usually negative unless there is associated renal pathology.

It is realized that many other conditions at times require differentation in the acute abdomen, among them strangulated hernias, regional ileitis, mesenteric lymphadenitis, mesenteric thrombosis, ruptured ectopic pregnancy, ruptured Graafian follicle, ileocecal tuberculosis, vasitis, torsion of the omentum, volvulus, intussusception, etc. etc., ad infinitum. However, when one misses one of the unusual conditions he does not feel quite as responsible or guilty as he would having missed one of the forementioned "Big Six".

25 E. Washington St., Chicago 2, Illinois.

MANUEL N. COOPER, M.D., GEORGE L. MITCHELL, JR., M.D.,
IVAN L. BENNETT, JR., M.D., and *FREEMAN H. CARY, M.D.,* Atlanta

Methyl Alcohol POISONING:

An Account of the 1951 ATLANTA EPIDEMIC

Shortly before midnight on Oct. 21, 1951, a 19 year old colored male was brought to the Emergency Clinic of Grady Memorial Hospital in an unconscious state. No history was available other than the ambulance driver's statement that the patient complained of headache and vomited before lapsing into coma. Physical examination revealed a moribund, unresponsive Negro male with normal blood pressure, bradycardia (48/min.), slow respirations (8/min.), dilated fixed pupils and rigid neck. Fifteen minutes after admission, the patient died in inspiratory apnea and opisthotonos following a generalized convulsion. The clinical impression was spontaneous subarachnoid hemorrhage, but lumbar puncture yielded clear spinal fluid. Two other patients were seen in the Emergency Clinic later that night. One was dead on arrival and the other was moribund. The latter patient, who died a few minutes after reaching the hospital, showed typical Kussmaul respirations and striking hyperemia of the optic discs. Investigation by police revealed that all three had been drinking bootleg or "alley" whiskey. On this evidence, a diagnosis of death due to methyl alcohol ingestion was made.

Since sporadic cases of adulterated alcohol poisoning are not uncommon among the population served by Grady Hospital*, no further significance was attached to the night's happenings. By late afternoon of October 22, however, "alley" whiskey victims began to appear at the hospital in large numbers indicating that the three deaths of the previous night were but the prelude to a major catastrophe. Subsequent investigations revealed that about

*A Christmas Eve cockail party in 1946, employing wood alcohol "punch", was responsible for 12 deaths.

60 gallons of bootleg whiskey had been brought into Atlanta on October 20 and distributed widely. Analysis of specimens of this "moonshine" showed 30 to 35 per cent methyl alcohol and 2 to 4.5 per cent ethyl alcohol.

The present report presents clinical observations made during this outbreak of methyl alcohol poisoning.

Proportions of the outbreak. A total of 323 patients who had ingested bootleg whiskey were seen during the period of the epidemic. Of these, 308 were Negro, 15 white; 210 were male and 113 female, with an age distribution of 10 to 78 years. There were 41 deaths. Twenty-two patients died before reaching the hospital or within thirty minutes after being brought to the Emergency Clinic. The other 19 deaths occurred in patients whose period of treatment lasted longer than thirty minutes, either in the hospital wards or in the Emergency Clinic. Of the patients who died, 40 were Negro, 1 white.

Screening Methods. Approximately one-fourth to one-third of the patients seen in the Emergency Clinic had drunk "alley" whiskey but were asymptomatic or merely frightened, hysteria mounting as news of the poisonings spread. It became necessary, therefore, to screen patients for evidence of methanol intoxication. Since no facilities for the rapid determination of blood methyl alcohol levels were available at the beginning of the outbreak, a "bedside" technique for determining serum carbon dioxide combining power was used routinely to demonstrate acidosis, the most prominent manifestation of wood alcohol intoxication. This simple method, recently described at the Mayo Clinic[1], requires only a test tube, a few simple reagents and two tuberculin syringes. This colorimetric test is done on 1 cc. of serum obtained from centrifuged, freshly-drawn blood. Values are read directly in milliequivalents from calibrations on the titrating syringe, and an experienced operator can obtain in one minute values which differ not more than one milliequivalent from results of the more complicated Van Slyke method. In this epidemic, 115 patients were acidotic, with a carbon dioxide combining power of less than 20 milliequivalents per liter. It is worthy of note that the only physical signs useful in screening patients for treatment were the ophthalmoscopic findings of disc hyperemia and retinal edema, although occasional severely poisoned patients failed to show these changes.

Latent Period and Variability in Response. It is well known that a period of hours to days usually elapses after ingestion of methyl alcohol before symptoms appear[2]. The period between drinking and onset of symptoms was variable in this epidemic. The shortest latent period observed was 40 minutes, the usual 12 to 24 hours, and the longest 72 hours. This delay presumably represents the time required for the oxidation of methanol to formaldehyde and formic acid, a reaction which proceeds slowly in the body.

A second peculiarity of wood alcohol poisoning is the extreme variability in susceptibility to a given amount of the material. Since the patient's estimate must be relied upon, our data permit only a general statement. The smallest dose which produced a fatal result was 3 teaspoons (about 15 cc.); the largest recorded in a survivor was 1 pint (about 500 cc.). Most patients claimed they drank about ¼ pint (approximately 125 cc.) of the mixture.

Table 1

FREQUENCY OF SYMPTOMS OF 31 HOSPITALIZED PATIENTS

Visual Disturbances	100%
Abdominal and/or Back Pain	67%
Headache	62%
Vomiting	52%
Dizziness	30%
Dyspnea	24%
Diarrhea	10%

Symptoms. Symptoms differed in no essential way from those previously described[2,3], and the frequency of occurrence in this epidemic as seen in 31 hospitalized patients is detailed in Table 1.

The most striking symptom was *visual disturbance*, in degree varying from mild photophobia and blurring to total blindness. Indistinct vision was the most frequent complaint, variously described as a "skim", "snowstorm", "seeing the wind", brightness, flashes or dancing spots. Some patients had indistinct vision only with sudden postural changes. In many, relief of acidosis brought rapid clearance of visual complaints, although detectable scotomata remained or later developed. Follow-up studies now in progress in the Grady Hospital Eye Clinic show that no patients are totally blind as a result of this epidemic. Most cases have shown continued gradual improvement. It is interesting to note that in the acute phase of the illness the degree of visual disturbance could not be correlated with objective findings in the retina.

In some patients *abdominal pain* and muscle guarding were severe enough to simulate acute surgical disease, and in one patient the occurrence of severe lower abdominal and flank pain led to suspicion of concomitant renal colic. The mechanism of this pain has been attributed to contraction of smooth muscle of the gastrointestinal tract, and such findings have been emphasized in pathologic reports[4]. *Headache* was a common complaint and, when accompanied by nuchal rigidity and back pain, simulated meningeal disease.

Vomiting was never persistent or troublesome, although about half the patients vomited at least one time. *Dyspnea* was a complaint seen in only one-fourth of the patients and correlated poorly with the much higher incidence of clinical and chemical acidosis.

Physical Findings. The *state* of consciousness varied from restlessness and anxiety to stupor and

coma. The *pulse rate* was normal and the *blood pressure* was normal or slightly elevated in most instances. Bradycardia, a grave prognostic sign, was seen in several desperately ill patients, of whom only two survived. It is interesting that circulatory function was well maintained, and we often observed the paradox of cold, clammy extremities and normal blood pressure in moribund patients. Dilated fixed pupils were seen in over one-half the hospitalized cases. Convulsions occurred in some instances, and pupils became miotic following the administration of sodium amytal.

Although a number of patients showed *Kussmaul* respirations, many whose carbon dioxide combining power was less than 10 milliequivalents per liter did not. A slow, shallow, gaping, "fish mouth" type of breathing was seen in moribund patients. *Pulmonary edema,* occasionally seen clinically, was a common autopsy finding.

Examination of the fundus showed extreme hyperemia of the optic disc with blurring of the disc margins due to retinal edema rather than true papilledema.

Mode of Death. All deaths were "respiratory" and followed a characteristic pattern. Coma deepened in the seriously ill, or, in some instances, developed with amazing rapidity in rational, relatively asymptomatic patients; there appeared simultaneously fixed, dilated pupils, clammy extremities, varying restlessness and, occasionally, bradycardia. Respirations became slow and gasping in character, and there gradually developed a tendency to inspiratory apnea. At the time of death, the chest suddenly expanded and locked in full inspiration; opisthotonos and convulsions often appeared at this point. Attempts at artificial respiration were hampered by the extreme difficulty of forcing air from the chest. Tracheotomy, laryngeal intubation and use of the "iron lung" did not influence the inspiratory arrest. The heart continued to beat after respiratory failure and, in the few electrocardiograms made, ventricular activity ceased before the auricular impulses failed to appear.

Table 2

SODIUM BICARBONATE TREATMENT AND RESPONSE IN ONE PATIENT

Time After Admission	Total Sodium Bicarbonate Given Intravenously (Grams)	CO_2 Combining Power
0	None	8.2 mEq.
1½ hrs.	40 grams	15.0 mEq.
4 hrs.	90 grams	20.0 mEq.
7 hrs.	115 grams	25.0 mEq.
9 hrs.	140 grams	35.0 mEq.
11½ hrs.	140 grams	39.0 mEq.
17½ hrs.	140 grams	21.0 mEq.
22 hrs.	190 grams	38.0 mEq.
60 hrs.	190 grams	23.0 mEq.
4 days	190 grams	25.2 mEq.

Treatment. In general, the severity of symptoms in methyl alcohol poisoning correlates with the degree of acidosis[2], and alkalinization is the mainstay of treatment. In many cases, relief of symptoms with sodium bicarbonate therapy was prompt and satisfactory; with correction of acidosis, there was return of consciousness, disappearance of pain and nausea, and improvement in subjective visual complaints. A few patients, however, despite return of carbon dioxide combining power to normal, remained comatose and died within hours or days with signs of massive brain damage.

Three to five per cent sodium bicarbonate was administered intravenously in five per cent dextrose solution in large amounts. Oral bicarbonate was given in some cases and was routinely prescribed for home consumption following satisfactory clinic treatment, but the nausea and vomiting seen in many patients made the intravenous route preferable.

The method of preparing solutions for intravenous administration deserves comment. The large amounts required soon exhausted the supply of bicarbonate available in sterile packets and, after the first few hours, sodium bicarbonate was weighed out directly from commercial packages for kitchen use and added to flasks of 5 per cent glucose solution for intravenous injection. Several hundred liters of sodium bicarbonate so prepared were infused in the course of this epidemic and it is noteworthy that no untoward reaction, even a mild pyrogenic response, was noted in any case. As an emergency procedure, the preparation of solutions of bicarbonate in this manner can be recommended as safe.

The amount of sodium bicarbonate required for reversal of the acidosis and subsequent maintenance of homeostasis was sometimes enormous. The administration of 150 grams of soda over a period of three hours was not uncommon. An outline of one patient's treatment and response is given in Table 2. It is interesting that although vigorous treatment often rendered patients alkalotic, tetany as a complication was seen only once.

Other methods of treatment that have been advocated are daily spinal fluid drainage[5], continuous gastric lavage[6] and ethyl alcohol administration[2,7]. In this epidemic, no large scale attempt to evaluate the therapeutic efficacy of these methods was possible. Spinal fluid and gastric juice were collected from several patients for methanol concentration studies, and the results confirmed previous observations that methanol reaches higher concentrations in spinal fluid than peripheral blood and that methanol is re-excreted in significant amounts in gastric juice. The use of ethyl alcohol to impede the oxidation of methyl alcohol has been advocated on theoretical grounds, and some authors explain the variability in susceptibility to methanol poisoning on the basis of ethanol ingestion. It has been shown in animal experiments that ethyl alcohol slows the breakdown of methyl alcohol in the body, presumably thereby controlling the rate at which

Table 3

MORTALITY AMONG TREATED PATIENTS

	No. Patients	Per Cent Deaths
All patients	323	6.2
Acidotic group (CO_2 less than 20 mEq.)	115	19
Severely acidotic (CO_2 less than 10 mEq.)	30	50

its toxic end-products are released. One patient in the present epidemic received 50 milliliters of absolute alcohol intravenously every 12 hours for three days and responded well, but alkali was also administered and the role of ethanol cannot be evaluated.

Relapses. Because of methyl alcohol's long persistence in the body, acidosis may reappear after treatment[2 7]. Six patients who received outpatient treatment with good response subsequently underwent relapse with recurrence of acidosis. Three of these were successfully treated again, one remained comatose and died despite vigorous therapy, and two died before return to the hospital. None had followed instructions to continue to take soda by mouth for at least 48 hours. The importance of continued observation for several days is to be emphasized. This, unfortunately, was not always possible during the outbreak described.

Laboratory Data. Some laboratory findings deserve comment. Low urinary pH was well correlated with acidosis, but acetonuria was moderate and ketone bodies were often absent from the urine of severely acidotic patients. Albuminuria was commoner than acetonuria.

Blood ketone levels were elevated but did not approach the values seen in diabetic acidosis; in no case were they sufficiently high to explain the severe acidosis.

Serum sodium and potassium values were not abnormal before therapy but were influenced by sodium bicarbonate administration. Hypokalemia was seen with the occurrence of overtreatment alkalosis, the lowest recorded value being 2.5 milliequivalents per liter. No clinical signs of potassium deficiency were noted but typical electrocardiographic changes were found. Response to potassium administration was prompt. Hypernatremia developed in some cases, the highest recorded value being 161.5 milliequivalents per liter. In all cases, blood sodium levels returned to normal spontaneously.

An interesting finding was elevation of the serum amylase several days after the onset of symptoms. Although most values returned to normal within a few days, one patient is being followed with continued elevation.

Pathology. Autopsy findings noted in the present epidemic were visceral congestion, pulmonary and cerebral edema and gross and microscopic evidence of extensive pancreatic necrosis. We have been able to find only one previous reference to pancreatitis in methanol poisoning[8].

Comment and Summary. Exigencies attendant upon the care of so many seriously ill patients in such brief time made it difficult to carry out any concerted observations on the efficacy of diagnostic and therapeutic procedures. In a few patients, analyses of spinal fluid and gastric juice confirmed previously reported data indicating the distribution and long persistence of methanol in the body. Although ketosis has been suggested[9] as being of major importance in the production of acidosis by methyl alcohol, our findings of only occasional acetonuria and slight elevation of blood ketone levels do not substantiate this theory. The consistent finding of elevation of serum amylase and the presence of pancreatitis at autopsy suggest that this may be of importance in the excruciating abdominal pain which many patients showed.

Other clinical points worth emphasis are the constancy of visual disturbance as a symptom, the low incidence of dyspnea, the frequent absence of Kussmaul respirations despite severe acidosis, the characteristic "respiratory" death, the tendency to relapse after treatment and the occasional development of hypokalemia after infusion of sodium bicarbonate.

The clinical picture of methyl alcohol poisoning may be confused with acute surgical disease of the abdomen and with cerebrovascular accident. Acidosis should suggest methanol as a possible etiologic agent. Hyperemia of the optic disc is an extremely useful sign if present.

One point that merits constant reiteration is the importance of acidosis as an indication of the severity of poisoning and the necessity for prompt and vigorous alkalinization in therapy. The true significance of acidosis in methanol intoxication is unknown, but the frequent prompt subsidence of symptoms with restoration of serum bicarbonate suggests that it may be the specific metabolic derangement responsible for the intoxication. The serious import of acidosis is indicated by Table 3 which includes only treated patients and excludes those dead on arrival.

REFERENCES

1. Scribner, Belding H.: The Bedside Determination of Bicarbonate in Serum, Proc. Staff Meet., Mayo Clin. 25:641, 1950.

2. Roe, Oluf: Methanol Poisoning, Acta Med. Scand., Supplement 182, 1946.

3. Chew, W. B.; Berger E. H.; Brines, O. A., and Capron, M. J.: Alkali Treatment of Methyl Alcohol Poisoning, J.A.M.A. 130:61, 1946.

4. Menne, Frank R.: Acute Methyl Alcohol Poisoning. A Report of 22 Instances with Post-mortem Examinations, Arch. Path. 26:76, 1938.

5. Pincus, Friedrich: Zur Behandlung der Methylalkohol-Erblindung mit Lumbalpunktion, Klin. Monatsbl. f. Augenh. 65:695, 1920.

6. Harrop, G. A., Jr., and Benedict, E. M.: Acute Methyl Alcohol Poisoning Associated with Acidosis, J.A.M.A. 74:25, 1920.

7. Agner, K., Höök, O., and von Porat, B.: The Treatment of Methanol Poisoning with Ethanol with Report of Two Cases, Quart. J. Stud. on Alcohol 9:515, 1948-49.

8. Burhans, E. C.: Methyl Alcohol Poisoning (A Clinical and Pathological Study of 11 Fatal Cases), Illinois M. J. 57:260, 1930.

9. Keeney, A. H., and Mellinkoff, S. M.: Methyl Alcohol Poisoning, Ann. Int. Med. 34:331, 1951.

Transitory OCULAR *Divergence* PARALYSIS *Due to* SICKLE CELL ANEMIA

CURTIS D. BENTON, JR., M.D., Atlanta

The paralysis of ocular divergence is characterized by the sudden onset of homonymous diplopia for distant objects with the preservation of binocular single vision at some near point. The diplopia is constant in amount for any given distance in all fields of testing; ocular versions and ductions are unrestricted.[1,2] Dunnington defined a "point of single vision by approximation" and a slightly more remote point of "single vision by recession."[3] This condition is easily distinguished from paralysis of one or both external rectus muscles because abduction of each eye is normal. Convergence spasm may cause diplopia for remote objects but it is variable in amount and usually even increases at near. The condition of divergence paralysis may be permanent or it may disappear when due to certain curable or self limited diseases.

The causes of divergence paralysis are several in number and unrelated except that each may produce injury to that area of the midbrain near the abducens nuclei that is thought to be the center for divergence. Dunnington reported three cases in 1923 due to epidemic encephalitis in young persons, who recovered normal ocular motility in five to twenty-four weeks.[3] One case in a young boy with chorea, and one in a man with tabes, were reported in 1926 by Lebensohn.[4] Dunphy, in 1928, introduced multiple sclerosis as a cause of divergence paralysis.[5] Metastasis from a breast cancer, was a cause in a seventy-one year old woman seen by Howard in 1931.[6] Stokes, in 1934, reported five cases.[7] In two elderly women no cause was found and the condition was permanent. Two other cases had had divergence paralysis for over twenty years and the fifth case was due to epidemic encephalitis with recovery. A cavernous hemangioma between the superior and inferior colliculi in the central grey matter, was found at autopsy in a case by Bender and Savitsky in 1940.[8] The tumor was very small and blocked the aqueduct of Sylvius causing internal hydrocephalus and death. Head trauma, was the cause of six cases of divergence paralysis reported by Savitsky and Madonick in 1945.[9] In four instances the trauma was not severe. Other causes listed by Walsh are poliomyelitis, poisoning with alcohol and lead, diphtheria, and vascular diseases.

As sickle cell anemia has never been reported to cause divergence paralysis, a case is here presented in which this disease seemed etiologically related to the ocular disorder.

Sickle cell anemia, a disease confined to the Negro race, affects many organs of the body including the central nervous system. In 1939, Arena reported five cases of cerebral vascular accidents in sickle cell anemia.[10] All had a hemiplegia. Hughes, Diggs, and Gillespie reported six cases of their own and reviewed nineteen previously recorded cases.[11] Their case number four had diplopia and case nineteen, of the reviewed group, presented ptosis of the right upper lid. Skoog reported a case of sickle cell anemia with involvement of several cranial nerves including III and IV.[12] Other instances of cerebral lesions have been reported by Connell and Wertham, Mitchell, and Angrist in 1942.[13,14] Grover reported forty-eight cases of sickle cell anemia with thirteen instance of neurological involvement; and among 92 cases reviewed by Higgins and Toone, eighteen had central nervous system symptoms.[15,16]

The pathological lesions of sickle cell anemia are said to be caused by stasis of blood flow due to failure of the abnormally shaped red blood cells to pass the smaller capillaries. This leads to thrombosis and infarction. Recently Kimmelstiel found ischemic infarcts in the brain without thrombosis.[17] The lesions may range from microscopic areas to atrophy of an entire cerebral hemisphere.

Case Report: This patient, L. B., was a 20 year old Negro girl who came to the Clay Memorial Eye Clinic on Nov. 1, 1951, complaining of diplopia which had appeared suddenly five days before. Visual acuity was normal in each eye. A convergent strabismus of 10 prism diopters was present with

From the Department of Ophthalmology, Emory University School of Medicine and the Clay Memorial Eye Clinic, Grady Memorial Hospital, Atlanta.

fixation at 20 feet. Binocular single vision was obtainable in a near range of 25 to 50 cm. Ocular ductions and versions were carried out without restriction. Diplopia fields showed a constant separation of the images in all six cardinal directions of gaze at a testing distance of one meter. A diagnosis of divergence paralysis was made from these data. Ophthalmoscopic examination showed the presence of abnormally tortuous retinal arterioles and veins. This is a characteristic of sickle cell anemia and found to occur in about half of all cases.[15] The sclera showed a very slight icterus. Except for the eye findings above, there were no other neurological abnormalities.

Review of the patient's record disclosed that sickle cell anemia had been diagnosed in 1950 when blood studies revealed 10 per cent immediate sickling of red cells and 90 per cent sickling in 24 hours. This test was carried out in an attempt to determine a cause for frequent indolent leg ulcers in this patient. No severe crises had been recorded but minor ones causing pains in the side, chest, and abdomen had occurred on at least three occasions. This patient also had a history of gonorrhea, chancroid, and secondary syphilis, each adequately treated.

At the time of the diplopia, this patient also complained of pains in the chest and body without physical findings in these parts. The temperature was 99.2°, pulse rate 108, and respirations 28 per minute. The urine had a specific gravity of 1.010, pH of 6.5, trace of albumin, and negative sugar. Red blood count was 3,230,000 and hemoglobin 8.7 Gm. The serum bilirubin was 1.0 mg. per cent; the direct Van den Bergh was negative. The above findings were indicative of a mild sickle cell crisis.

On Nov. 5, 1951 homonymous diplopia was present at all distances beyond one meter with a muscle light for fixation and a red lense over one eye, but without the red lens, fusion was possible at 20 feet. In another three days an esophoria existed at distance. Without special treatment or prism exercises, prism convergence and divergence rapidly improved to normal amounts by Nov. 15, 1951. The final measurements were for distance, 1 prism diopter esophoria, no hyperphoria, prism convergence 16/8 and prism divergence 9/2. At near the measurements were 1 prism diopter esophoria, prism convergence 32/16 and prism divergence 18/10.

The pathological lesion, in this case, was presumably a small thrombosis in the center for ocular divergence which is thought to be in the brain stem near the abducens nuclei.

SUMMARY

A case of transitory paralysis of ocular divergence occurring as the chief manifestation of a mild crisis of sickle cell anemia is reported. Although sickle cell anemia has not been previously reported as a cause of this condition, it should be considered in the etiological possibilities of paralysis of divergence or even other extraocular muscle paralyses in Negro patients.

BIBLIOGRAPHY

1. Walsh, F. B.: Neuro-ophthalmology, Williams & Wilkins Company, Pp. 307-308, 1947.
2. Bruce, G. M.: Ocular Divergence: Its Physiology and Pathology, Arch. Ophth. 13:639-660, 1935.
3. Dunnington, J. H.: Paralysis of Divergence with Report of Three Cases Due to Epidemic Encephalitis, Arch. Ophth. 52:39-49, 1923.
4. Lebensohn, J. E.: Paralysis of Divergence with Chorea and with Tabes, Am. J. Ophth. 9:684-686, 1926.
5. Dunphy, E. B.: Paralysis of Divergence, Am. J. Ophth. 11:298-299, 1928.
6. Howard, H. J.: Divergence Paralysis, Am. J. Ophth. 14:736-737, 1931.
7. Stokes, W. H.: Paralysis of Divergence, Arch. Ophth. 11;651-664, 1934.
8. Bender, M. B., and Savitsky, N.: Paralysis of Divergence, Arch. Ophth. 23:1046-1051, 1940.
9. Savitsky, N., and Madonick, M. J.: Divergence Paralysis and Head Trauma, Arch. Neurol. & Psychiat. 53:135-137, 1945.
10. Arena, J. M.: Cerebral Vascular Lesions Accompanying Sickle Cell Anemia, J. Pediat. 14:745-751, 1939.
11. Hughes, J. G., Diggs, L. W., and Gillespie, C. E.: The Involvement of the Nervous System in Sickle Cell Anemia, J. Pediat. 17:166-184, 1940.
12. Skoog, A. L.: Cerebral Complications in Sickle Cell Anemia, South. M. J. 33:714-721, 1940.
13. Connell, J. H.: Cerebral Necrosis in Sickle Cell Disease, J.A.M.A. 118:893-895, 1942.
14. Wertham, F., Mitchell, N., and Angrist, A.: The Brain in Sickle Cell Anemia, Arch. Neurol. and Psychiat. 47:752-767, 1942.
15. Grove V.: Clinical Manifestations of Sickle Cell Anemia, Ann. Int. Med 26:843-851, 1947.
16. Higgins, W. H., and Toone, E. C.: The Variable Manifestations of Sickle Cell Anemia, Virginia M. Monthly. 76:400-404, 1949.
17. Kimmelstiel, P.: Vascular Occlusion and Ischemic Infarction in Sickle Cell Anemia, Am. J. M. Sc. 216:11-19, 1948.

PRESS COMMENT: *Washing Hands Too Often?*

One of the first things that most children learn is that hands should be washed many times a day.

Now Dr. Donald M. Pillsbury, of Philadelphia, who is president of the American Academy of Dermatology and Syphilology, tells us that Americans wash their hands too much. The noted skin specialist reminds us that our hands have a self-disinfecting power, just like the rest of our body's skin. He points out that, under normal circumstances, it is practically impossible for the hands to pass dangerous germs into the mouth.

We do not recommend to the mothers of Dooly County that they allow their children to eat without washing their hands and we are inclined to believe that if Dr. Pillsbury will watch the average child play, he will also recommend the practice of washing before eating.

—Vienna News

DUODENAL *Adenoma:*

Report of Case

GEORGE T. NICHOLSON, M.D., Cornelia;
CHARLES M. HENRY, M.D., Clarkesville;
A. G. SINGER, M.D., and
WILLIAM H. GOOD, JR., M.D., Toccoa

Duodenal polyps arising from Brunner's glands may cause serious disability and are, therefore, worthy of note. Johnson and Dorough[1] reported such a case in 1949 and gave a concise review of the literature. As was noted in their report "of all the symptoms of this condition, hemorrhage is probably the one giving a lead to the diagnosis". In the case presented at this time, bleeding and its related symptoms were the only lead as to the diagnosis.

REPORT OF A CASE

Mr. P. C., a 60 year old farmer, was first seen on Sept. 13, 1950. His chief complaint was extreme weakness and dyspnea on the slightest exertion. He first noticed the weakness three or four months prior to the examination and also noticed that it had grown progressively worse. The dyspnea was first noticed about four weeks before the examination. Bowel movements had been regular but for about six weeks the stools had been black and "tarry". For several years he had known of the existence of perianal skin-tags which would become swollen and painful at times but would never bleed. During the four months there had been no anorexia or weight loss.

Past history revealed only that he had had typhoid fever as a child but no other serious illnesses. Physical examination was negative except for the extreme pallor of the skin and a slight yellowing. Sigmoidoscopic examination was negative.

Laboratory Examinations: Urinalysis: Negative. Blood: R. B. C., 2,800,000; hemoglobin 7.8 gms., W. B. C., 10,500, Polys 74%, Lympho 22%, Eosin. 2%, Monos 2%.

X-ray Examination: Preliminary film of the abdomen shows that the lumbar vertebrae, sacro-iliac articulations and bones of the pelvis are normal. The psoas shadows are normal, as are the kidney shadows.

The barium mixture passed readily to the stomach. The esophagus and stomach were normal. The stomach was high in keeping with the patient's build. There was no evidence of ulceration of the duodenum or obstruction of the passage of the barium through any part of the duodenum. There were two small diverticula medial to the first portion of the duodenum and there was a large diverticulum which arose from the transverse portion of the duodenum and then appears to turn over so that it hangs below its origin. Just below this large diverticulum there was a dilation of the distal portion of the duodenum and there was a space-taking lesion which was apparently almost round. On some of the films a polyp can be outlined. There was no obstruction in spite of the fact that the lesion filled the lumen of the intestine. The remainder of the gastrointestinal tract was apparently normal and the mobility was normal since the head of the column had reached the cecum in two hours.

Our diagnostic impressions at that time were: 1. Multiple diverticula of the duodenum, 2. Polyp, probably pedunculated, third portion of the duodenum.

Exploration of the abdomen was advised and the patient was admitted to the hospital on Sept. 24, 1950. The anemia was treated by transfusions of whole blood, and on Sept. 26, 1950 abdominal exploration was done through a left midabdominal transverse incision. The duodenum was exposed and freed at its distal portion. It was dilated giving the appearance of a pseudodiverticulum. No tumor could be felt. The incision was extended a little to the right and at the junction of the first and second portions of the duodenum a golf-ball sized tumor could be felt within the lumen. The tumor was quite movable. An incision was made in the anterior wall of the intestine just distal to the pyloris and the tumor was delivered readily through the incision. It was found to be attached to the posterior wall by a pedicle about 22 mm in length and 10 mm in diameter. The tumor was excised and the defects in the posterior and anterior walls were closed. No other abnormality was seen or palpated within the peritoneal cavity. The wound was closed without drainage.

Pathology Report: Gross specimen—: The tumor measures 4.5 x 3.5 x 2.6 cm. and weighs 23 grams. One surface is rather flat and on this surface there is what appears to be an arrow pedicle which is 8 mm in diameter. The tumor evidently was attached at this point. There is a peculiar, somewhat indented area at one end of the tumor about 2.5 cm in diameter.

Gross palpation shows the tumor is quite firm. Incision through the center of the mass shows that all the center consists of light tan to yellow, fairly firm tissue with a lobular arrangement suggesting pancreatic tissue. Around the outside of the tumor there is what appears to be mucosa between 2 and 4 mm in thickness. When the mass is incised a flat area on one end has the gross appearance of a large broad peptic ulcer.

Microscopic examination: The sections show that the mass is not pancreatic tissue as suggested grossly but is, rather, an adenoma. It is made up of a multitude of glands that look like they are capable of producing mucous. These are made in turn of pyramidal cells with flat nuclei in their bases and a clear, light-staining cytoplasm in their free portions. The glands adopt a sort of lobular arrangement with ducts, apparently collecting mucous from the glands and taking it to the duodenum. Streaks of smooth muscle and fibrous tissue separate the groups of glands. No definite ulceration is discovered on the surface, although the whole structure is not covered with duodenal mucosa and part of the outside surface of the tumor is made of glandular material, of the tumor

Read before the Medical Association of Georgia in annual session, Augusta, April 20, 1951.

itself. There is no malignancy suggested. The tumor is rather unusual.

Pathologic diagnosis: Adenoma, mucous gland type, of the duodenum.

COMMENTS

It is interesting that the patient stated that he had no pain and his only signs and symptoms were those referable to intestinal bleeding. Apparently there was sufficient ulceration of the tumor to cause the bleeding but not enough to produce pain.

Also interesting to note, and completely unexplained is the paradox of the position of the tumor in the x-ray and its actual location in the duodenum. Presumably peristaltic action of the duodenum pulled the tumor to the position as noted on the films. It might have been expected that this action would have been productive of some interference with digestion but none was noted. Since the mucous glands in the tumor are similar to those of Brunner's glands, it is safe to say that this is an example of adenoma of the duodenum arising from the Brunner's gland.

REFERENCE

1. Dorough, W. S., and Johnson, McClaren: J.M.A. Georgia, 38:542 (Dec.) 1949.

JAMES R. SIMPSON, M.D., EXUM WALKER, M.D.,
and *WILLIAM W. MOORE, M.D.*, Atlanta

The Role of
CEREBRAL ANGIOGRAPHY
in the Management of Cerebal
VASCULAR ACCIDENTS

Although more than 20 years have elapsed since cerebral arteriography was introduced by Egas Moniz[1], some indifference to its general acceptance and use still exists. Since the information gained from this form of intracranial exploration is often quite valuable not only from a diagnostic standpoint but also in determining the exact treatment, we feel that its use is warranted in the patient suffering a cerebral vascular accident. The technic of this examination has improved so much in recent years that it is now considered a minor diagnostic procedure.

Cerebral angiography may be described as the process of demonstrating the intracranial vascular tree by means of roentgenograms taken during the injection of a radio-opaque material into these vessels. If the roentgenogram is taken during the period of arterial filling, the result is an arteriogram. If additional exposures are made during the period of venous filling, the result is a venogram. The total study is called cerebral angiography.

When the procedure was first attempted by Moniz, a solution of strontium bromide was used. This drug had serious toxic effects and was abandoned because one death occurred in the first six cases. Thereafter a solution of sodium iodide was used in approximately 200 patients. It also induced serious toxic reactions in the form of headaches, convulsions, and transient hemiplegia. After 1931 it was abandoned in favor of thorotrast (a 25 per cent colloidal suspension of thorium dioxide), and this is still in popular use. Thorium, however, is a radioactive element and is deposited in the reticuloendothelium of the liver, spleen, bone marrow and lumph nodes. Thus it theoretically threatens the hemopoietic system. Diodrast is the most recent substance adopted for use in cerebral angiography. Although it has certain properties which make it less satisfactory from a technical stand-

Read before the Medical Association of Georgia in annual session, Augusta, April 18, 1951.

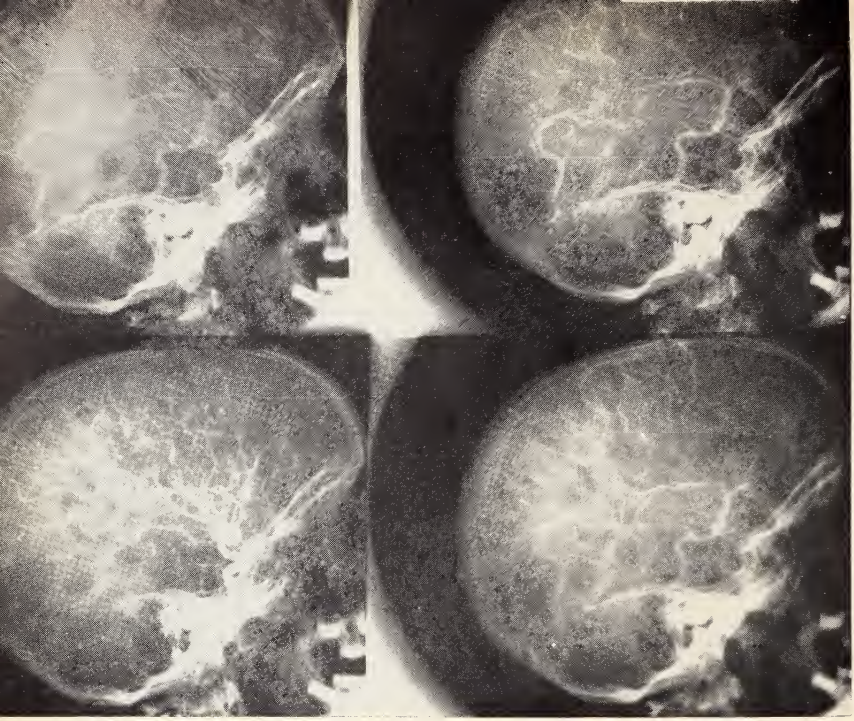
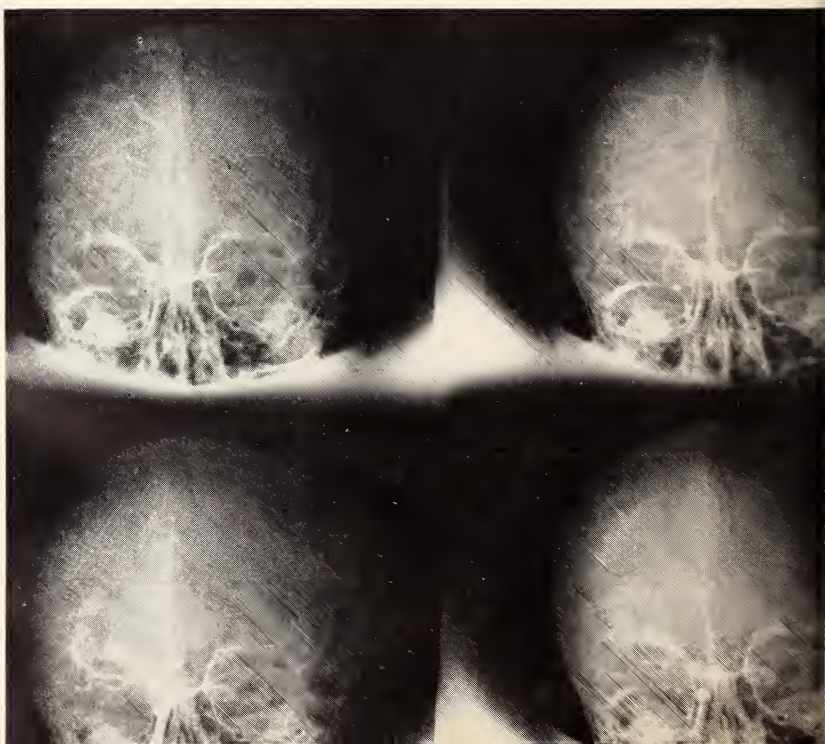


Fig. 1. Normal carotid angiogram, lateral projection, showing arterial, capillary and venous phases.

Fig. 2. Normal carotid angiogram, A-P projection.



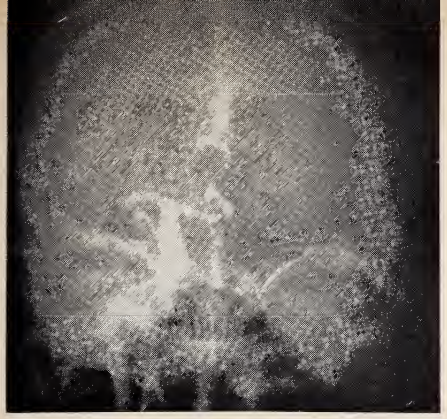


Fig. 3. Large aneurysm arising at the bifurcation of the internal carotid artery. The patient, a seventy year old female, suffered a spontaneous subarachnoid hemorrhage without localizing signs. Occlusion of the internal carotid artery in the neck with a tantalum band was followed by recovery.



Fig. 4. Aneurysm of left middle cerebral artery. The patient, a nineteen year old male, suffered a spontaneous subarachnoid hemorrhage with unconsciousness, aphasia and a right hemiplegia. Improvement followed intracranial ligation of the aneurysm, but a moderate degree of aphasia and weakness of the right arm persists.

point, it does not have the potential long-term danger of thorotrast and hence is now more widely used.

The most common indication for cerebral aniography is to study patients who have suffered a spontaneous subarachnoid hemorrhage, but the differentiation of this condition from other types of cerebral vascular accidents is not always easy. One is not infrequently confronted wtih cases in which the signs are equivocal, especially if seen late in the course of the disease.

The mortality rate of spontaneous subarachnoid hemorrhage when treated conservatively is extremely high. Hamby's[2] figures show that, of 130 patients who had this condition, 67 died in the first attack and 14 others subsequently had fatal hemorrhages, making a total of 81 deaths. In these 130 cases, the cause of the hemorrhage was determined in 47 patients: 41 by necropsy and six by operation. Ruptured aneurysms were found in 44 of the 47 patients (93.6 per cent). Although the mortality rate of cerebral thrombosis is not this high, the morbidity is great and the sequelae are serious.

Since the treatment of the two conditions is frequently different, it becomes imperative that the type of cerebral vascular accident be accurately determined. We believe that cerebral angiography enables one to make this differentiation; thus it becomes the first step in definitive treatment. It is also of great diagnostic aid in other conditions, among which are vascular tumors and malformations, arteriovenous fistulae, brain tumors and craniocerebral injuries.

Cerebral angiography is carried out by introducing the dye (10 cubic centimeters of 35 per cent diodrast) into the common carotid artery by percutaneous injection. Occasionally it is necessary to expose the vessel through a small incision in the neck. Exact coordination between the surgeon and the radiologist is required since four radio-

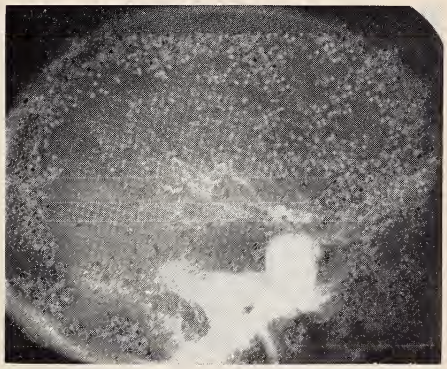


Fig. 5. Large aneurysm of internal carotid artery successfully "trapped" between ligatures placed intracranially and in the neck.

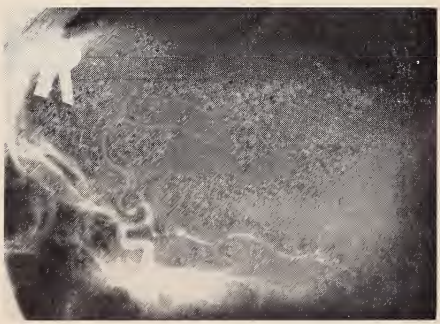


Fig. 6. Thrombosis of middle cerebral artery.

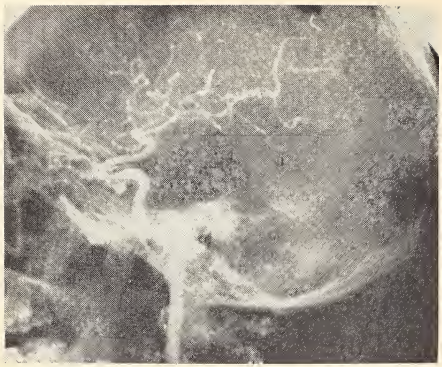


Fig. 7. Post traumatic arterio-venous fistula between the internal carotid artery and cavernous sinus. The patient, a twenty-five year old male developed a pulsating exophthalmus on the right five days after a severe head injury.[2] Recovery followed "trapping" of the fistula between ligatures placed on the artery intracranially and in the neck.



Fig. 8. Arterio-venous angioma of brain. The patient, a twenty-two year old female who suddenly developed aphasia and a right hemiplegia. Ventriculography revealed a normal ventricular system.



Fig. 9. Subdural hematoma. Recovery followed trephination and evacuation of the hematoma.

graphic exposures are made as rapidly as possible while the dye is being injected. A simple and inexpensive technic has been devised for this purpose and has proved satisfactory[3]. By this procedure one can visualize the entire intracranial arterial tree with the first exposure and the capillary and venous systems with subsequent pictures.

The value of cerebral angiography in the diagnosis and anatomic location of intracranial aneurysms cannot be overemphasized. The size of the aneurysm and its relationship to the blood vessels of the circle of Willis can be accurately determined. The knowledge gained gives a rational basis for therapy. Intracerebral hematomas become evident because of displacement of the cerebral vessels by the hemorrhagic mass. In thrombosis, complete occlusion of a portion of the vascular tree is combined with slight dilatation of the other vessels, which indicates an attempt toward the development of collateral circulation.

In the past it has been considered proper to institute conservative treatment for the patient suffering an acute cerebral vascular accident; and specific therapy was not directed at the control of hemorrhage, the altered intracranial dynamics, the progression of a thrombus, or associated vasospasm. With the aid of cerebral angiography we can now make a positive diagnosis and gain specific information which in turn leads to specific therapy.

REFERENCES

1. Moniz, E.: L'Angiographie Cerebrales. Masson et Cie, Paris, 1934.

2. Hamby, W. B.: Spontaneous Subarachnoid Hemorrhage of Aneurysmal Origin, J. A. M. A., 136:522-528, 1948.

3. Rosenberg, L. S., and Simpson, J. R.: A Simple Serialographic Technic for Cerebral Angiography, Radiology, 54:869-874, 1950.

ABDOMINAL PUNCTURE

as a Diagnostic Aid

CHARLES M. HENRY, M.D., Clarkesville

Abdominal puncture is a simple procedure which has not had the recognition it deserves as a diagnostic agent. There are several reports in the literature of its value in the diagnosis of peritonitis in children by the identification of bacteria from smears and culture of aspirated material.

Neuhof and Cohen in 1926 reported the use of abdominal puncture not only for inflammatory conditions but also for the diagnosis of internal injury following trauma to the abdomen. Since that time a number of articles have appeared on visceral injury following non-penetrating trauma to the abdomen but there are few if any references to diagnostic puncture. It is in such injuries where prompt and correct decision as to the necessity of surgical exploration may be the margin between life and death.

The technic is very simple. The site for puncture is chosen according to clinical impression. For example, if a ruptured spleen is suspected, a tap is made in the left upper quadrant. Novocain infiltration is carried down to the peritoneum and through this area an 18 gauge needle on a syringe is introduced into the peritoneal cavity. Gentle suction is then applied by the syringe. Even if only a small amount of fluid is obtained it should be considered as abnormal. If no fluid is obtained it is well to try another area. The fluid should be examined under the microscope and smears and cultures made if indicated. A portion should then be centrifuged to get a more accurate picture of the non-cellular content. Bile, for example, may be masked if it is mixed with blood.

At first thought it is natural to fear pushing the needle into the bowel. One has only to remember that force and counterpressure are necessary to insert a much finer needle through the bowel during intestinal suture to realize that this possibility is almost nonexistent.

The use of the procedure may best be illustrated by a few thumbnail summaries of actual case records. The first four represent serious visceral injury from non-penetrating trauma to the abdominal wall.

J. G., a 2-year-old child was injured in an automobile collision. The child was conscious but had grunting respirations. Its general condition was good. An x-ray of the chest and abdomen was negative. Clinically there was a question as to whether the child had intrathoracic or intra-abdominal injury. Abdominal tap was productive of free blood. Laparotomy revealed a large contused area on the lateral aspect of the liver.

C. A., a 40-year-old woman was driving her car when it was struck and overturned. On admission to the hospital she complained of severe pain in the chest and abdomen. She was in moderate shock. Abdominal tap revealed blood and she was operated upon immediately. A large actively bleeding rent in the liver was repaired.

In these two cases there was doubt as to whether the primary injury was in the abdomen or in the thorax. Sufficient information was obtained to warrant immediate surgical exploration of the abdomen.

J. P., a 50-year-old man was struck by an automobile. On admission to the hospital he was in shock, unconscious, with bruises and abrasions about the head and extremities and a compound fracture of the right forearm. He improved but slightly after administration of plasma. Because of the sustained shock, internal bleeding was suspected. Abdominal puncture was productive of frank blood. Laparotomy revealed an extensive laceration of the mesentery.

In the absence of symptoms or signs a definite diagnosis of internal bleeding was made on an unconscious patient.

J. T., a 71-year-old man was knocked down by a truck. He was admitted complaining of severe pain in the abdomen. Examination showed a rigid abdomen but no marks of trauma. A peritoneal tap was done and turbid yellow fluid was aspirated. Smears showed a few leukocytes and many bacteria. Abdominal exploration disclosed a perforation of the sigmoid colon.

It is not always easy to tell whether visceral perforation or hemorrhage is present but in the case just cited the diagnosis was greatly simplified.

Not infrequently have we met puzzling situations, where there is not only a question as to the correct diagnosis but also as to the proper management. Some of these questions we have been able to answer by abdominal puncture.

E. H., a woman 39 years old was admitted with a history of abdominal pain and vomiting for one day. Because of moderate distention and intermittent bowel sounds, a diagnosis of intestinal obstruction was considered. X-rays of the abdomen were inconclusive. However, abdominal puncture was productive of frank blood. On closer questioning a fairly good history for ruptured ectopic pregnancy was obtained. Pelvic exploration was immediately done and this diagnosis confirmed.

B. H., an asthenic male 36 years old had severe abdominal pain with radiation to the left shoulder for 12 hours before admission. There had been pain in

the upper abdomen after meals for 2 years and weight loss for several weeks. A barium x-ray study one week before admission had indicated a duodenal ulcer. His abdomen was rigid. On abdominal puncture, free blood was withdrawn. Operation revealed a large tumor of the left lobe of the liver which had spontaneously bled.

K. D., an obese 40-year-old woman was admitted complaining of severe abdominal pain for about 1 hour. There had been intermittent pain in the right upper quadrant for a month previous. On admission she was sweating freely and had a diffusely tender abdomen. Peritoneal aspiration produced turbid brown fluid which on microscopic examination was seen to contain cholesterol crystals. A tensely swollen acutely inflamed but unruptured gallbladder was found at operation.

A. W., a 47-year-old woman had a history of abdominal swelling for a year with attacks of pain and vomiting characteristic of biliary colic. On admission abdominal puncture was done and fluid containing bile and cholesterol crystals was withdrawn. Because of her poor general condition operation was deferred. Exploration three weeks later revealed a subhepatic collection of "white" bile and a thick walled gallbladder containing normal appearing bile but no calculi. There was no evidence that gross perforation had occurred.

W. S., an emaciated elderly Negro had suffered severe pain in his abdomen for 4 days. This had become somewhat worse on the day of admission to the hospital. The right side of his abdomen was rigid and there were findings suggestive of pneumonia in the right lung. Aspiration in the right lower quadrant revealed viscid pale yellow fluid typical of that seen following perforation of a peptic ulcer. A ruptured gastric ulcer was found at operation.

P. T., a 30-year-old woman was shot through the abdomen. At operation extensive intestinal injury was repaired. There was a retroperitoneal hematoma on the left side but exploration of this region was not thought to be justified. Five days later abdominal swelling developed to the left of the midline. Aspiration yielded blood tinged fluid which was unmistakably urine.

M. L. W., a 38-year-old woman had a cholecystectomy for acute cholecystitis with calculi. A Penrose drain was left in the gallbladder fossa and removed on the third day, since there was no evidence of a blood or bile leak. After this she gradually began to complain of pain in her abdomen and left shoulder. Her abdomen gradually became distended. On the 6th postoperative day an abdominal tap revealed bright bloody fluid which on centrifuging separated into a thin layer of blood cells and bile. Abdominal exploration revealed bile leaking from a very small accessory cystic duct.

Discussion

These few cases are briefly reported to indicate some of the uses of this simple procedure. It should be emphasized that it is only an aid in diagnosis and should be interpreted as a part of the clinical examination. Any fluid obtained is significant but "dry" taps must be considered as meaningless. If sufficient indications for operation are present a negative tap should be disregarded. The procedure is particularly of value in cases where the diagnosis is in doubt and where time is a factor. Thus if blood is obtained from the abdominal cavity, time consuming laboratory procedures may be eliminated. Furthermore, we have found that a sample of aspirated fluid may convince the patient as well as the surgeon of the necessity for immediate operation. It is so strikingly enlightening at times that one might paraphrase Deaver's aphorism about the scalpel and say "the aseptic needle dispels the mystery and reveals the truth."

Summary

Diagnostic abdominal puncture is a safe, simple and often valuable procedure, particularly in the rapid appraisal of nonpenetrating abdominal injuries as well as other acute surgical conditions within the peritoneal cavity. Several illustrative cases are cited.

Ed. Note: *Since the procedure described by the author has never gained wide acceptance, the paper was submitted to a recognized surgeon for comments. He replied as follows:*

"In general, I distrust the procedure described and deplore the use of the ambiguous term "abdominal puncture" to describe paracentesis. The author's viewpoint regarding his procedure as one to be used as a part of the clinical examination is disturbing. It should be pointed out that there are certain definite contraindications such as, avoiding puncture near previous abdominal incisions, and the implication that negative results are reassuring is considered hazardous. As a matter of fact, I take a dim view of the whole subject as I do of peritoneoscopy."

A. M. A.

Treatment of drinking water supplies with fluorine to combat tooth decay has been approved by the American Medical Association.

The fluoridation process has been hailed by the American Dental Association and several public health groups on the basis of tests which have been in operation for up to more than four years in 140 communities.

The AMA approval was announced today in the Association's Journal after investigation of the clinical results of the city water supply experiment by its council on pharmacy and chemistry and its council on foods and nutrition.

The AMA said "the councils believe that the use of drinking water containing up to one part per million of fluoride is safe. However, the use of products which are naturally high in fluoride content, such as bone meal tablets, or of lozenges, dentrifices or chewing gum to which fluoride has been added should be avoided where the drinking water has been fluoridated."

Georgia's Program for the

CRIPPLED CHILD

WILLIAM LITTELL FUNKHOUSER, M.D., Atlanta

The Cripplied Children's program for Georgia has recently been placed under the Board of Public Health as of July 1, 1951. Since 1937 it has functioned under the Department of Public Welfare. We should be acquainted with the program, the amount of money spent, the source of the funds, and the actual operation, so as to be prepared to give constructive criticism and cooperate to increase and improve the service in order that all who need care may secure treatment.

The term "cripple" should be changed to "handicapped" to broaden the term to include any child who is so disabled that he cannot compete on equal terms with the normal. If the child has a disability which can be corrected by modern methods now available, he should be given the benefit of this service to increase his efficiency to the highest point possible.

The Federal government provides two funds, A and B, in Georgia; Fund A is set at $845,565.00. This fund has to be matched by the State. Fund B is a direct gift not having to be matched and amounts to $90,181.00. In order to finance the State's program, however, an additional amount has to be appropriated to cover the annual budget. The 1952 grant will be double the present amount. This will supply additional funds to expand the service.

The following table gives the expenditures for the past year:

Hospitalization	$171,111
Convalescent Care	85,945
Appliances	43,816
Field Service:	
Physical Therapy	1,882
Nursing	17,202
Travel	1,609
Medical Stenographers	13,346
Clerical Expenses	9,346
Transportation for Patients	431
	$392,258
Supervising and Administrative	40,723
Total	$432,981

	1948	1949	1950
Comparative Expenses	$358,620	$417,890	$432,981
Number Children treated	1,408	1,595	3,827
Cost per child	$254	$262	$113

You will note that even with the present increased cost (as an example, the per diem hospital cost has increased from $4.50 to $10.00 to $15.00), this past year more children have been treated with less than half the cost per case. This has been accomplished by having dressings and casts changed in the clinics rather than in hospitals, reducing to a minimum the length of stay in hospital before and after operation, use of foster and convalescent homes rather than hospitals, and by sending patients home to convalesce when it was at all possible.

The state has been divided into nine districts, five of which are served by the clinics in Atlanta, and one each in Augusta, Savannah, Albany, and Columbus. There are 18 orthopedic clinics held monthly, 12 plaster cast clinics, four cerebral palsy clinics, and four clinics for early poliomyelitis.

There is one medical director, one supervisor, nine orthopedists, two plastic surgeons, two physiatrists, one pediatrician, one supervisor of nurses, five nurses, one physical therapist, and a nutritionist supplied by the Board of Public Health.

Detailed records are kept with follow-up notes of every visit. The files are permanent and are available at all times to any one with authority to peruse them.

There are 11 hospitals for white children and

Read before the Medical Association of Georgia in annual session, Augusta, April 19, 1951.

four for colored. Aidmore, the convalescent hospital operated by the Elks Order in Georgia and used for convalescent care. Physical and occupational therapy and speech training are given there, and school is maintained to enable the children to continue their studies.

Any case requesting service is entitled to be referred to the clinic, and they are usually referred by the physician, nurses, local health department, county welfare worker, or by Red Cross. A social, medical, and financial history is requested. After the examination is completed and all circumstances are evaluated, the case is either accepted, rejected, or referred to the proper agency or clinic. If the patient is financially able to pay in full, he is referred to his family physician for treatment or to advise. If the family is able to pay any part of the service they are requested to assume this responsibility.

With the expensive hospital charges, the high cost of braces and shoes, expensive antibiotics and such drugs as cortisone and ACTH, care must be exercised to safeguard the expenses in order to remain within the budget. If a patient is acceptable and the child can be rehabilitated, treatment is planned at once. An attempt is made to evaluate the mental status and if nothing can be accomplished by training and education, the family is sympathetically informed. With such a large number of patients needing care who can be benefited, those with hopeless conditions have to be rejected in order to render proper service to those who can be benefitted.

Reports are sent to the individual or clinic who is sponsoring the child's application. If a physician, his cooperation is enlisted and recommendations sent to him. Every effort is made not to invade the province of the family physician but to create an atmosphere of mutual assistance, the objective being to rehabilitate a handicapped child.

---

32 Ponce de Leon Avenue, N. E., Atlanta.

Public Health and

CIVIL DEFENSE

LESTER M. PETRIE, M.D., Atlanta, *Deputy Director*
Civil Defense Health Service

Georgia's top Civil Defense and Civil Defense Health Services leaders now have agreed upon a five-point plan to bring Civil Defense down to the John Q. Public level. The plan makes it apparent that in the event of a major disaster there will be only one place where the people in the disaster area can go to obtain medical care for their injuries, that is the nearest improvised hospital (the nearest school). General knowledge of this fact together with adequate first aid training on the part of the general public will be very effective in prevention of panic. It also means that all local civil defense health services officials, and especially all physicians, must be organized to staff the improvised hospital system.

The plan is designed to serve all citizens of Georgia regardless of whether they live in a target or a non-target area. It is safe to assume that in the event of enemy attack, the majority of our citizens will be in non-target areas. Nevertheless, they will be prepared to do two things; 1. to receive and care for evacuees from the target areas and 2. to send trained professional and technical assistance to the target areas. The plan resulted from a joint meeting of the various Civil Defense branches called by officials of the State Health Department recently and lays out, point by point, how each Georgia community must organize for a very possible enemy attack anywhere in our State.

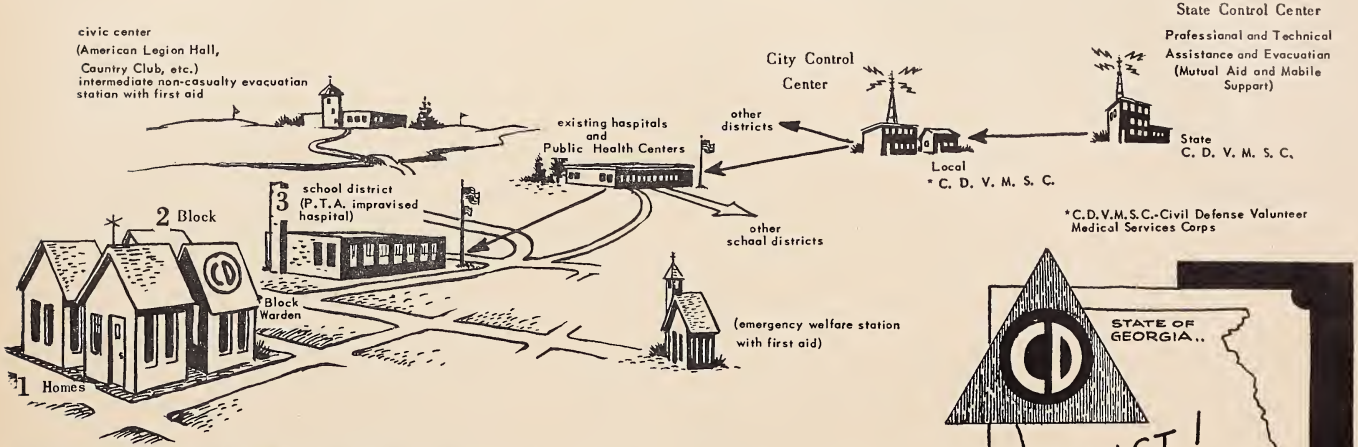
The plan, as agreed upon calls for:

1. At least one Red Cross first-aid worker in each home, and extra cots and supplies.
2. A fully-equipped first aid station with at least one person trained in nurse's aid work in each block or similar area.
3. A fully-organized stand-by improvised hospital in each school building, manned by citizens organized by the Parent-Teacher Association with technical and professional assistance from the hospital staff of a designated near-by hospital, or others having proper qualifications. (If a bomb should destroy the hospital building, it will not mean the hospital in its entirety is destroyed. As long as any staff members survive, the hospital will continue to function through the improvised hospitals set up in the schools.)
4. Churches prepared to handle emergency welfare work. Civic centers, including American Legion posts and country clubs or other community centers,

SELF-HELP and NEIGHBOR-HELP

Recommended uniform State-wide plan for Target and Non-target (evacuation and support) Areas.
(Civil Defense Health and Related Services)

prepared by the Georgia Department of Public Health
T. F. Sellers, M.D., Director
Atlanta, Georgia





1.Homes - - -At least one trained Red Cross First Aid worker in every Home. Assemble C. D. household first aid kit---extra cots & supplies.

2.Block ---At least one person trained in Red Cross home nursing and one in Red Cross nurse's aid course---one block first aid station under Block Warden.

3.School District PTA ---Complete community C.D. organization under direction of P. T. A. and School Staff. Repeated drills.

4.Coordination ---With emergency welfare centers (churches) intermediate welfare non-casualty evacuation centers (civic centers); other C.D. Services.

5.Learn ---Learn essential facts about survival under atomic and other bomb attacks; chemical and germ warfare; and other major disasters.

EVEN IF YOU ARE NOT IN A TARGET AREA, YOUR COMMUNITY WILL RECEIVE REFUGEES AND WILL SEND PROFESSIONAL AND TECHNICAL ASSISTANCE. THIS PLAN WILL WORK IN EITHER NON-TARGET OR TARGET AREAS!

readied for use as non-casualty evacuation centers. These centers handle the evacuation to non-target areas of such people as pregnant women, young children, chronic illness cases, and any others whose physical condition renders them a definite liability rather than an asset to rehabilitation of the area.

5. All citizens to learn the essential facts about atomic bombs, the book "Survival Under Atomic Attack", and many other Civil Defense booklets including those on chemical and germ warfare.

Civil Defense volunteers, P. T. A. organizations, and school teachers have been alerted to their responsibilities. The chart "Self Help and Neighbor Help", like the one printed opposite this page, recently appeared in their publications "The Georgia Alert" and "The Georgia Parent Teacher". Physicians must study and understand the plans so as to intelligently answer the many questions of the lay volunteer workers as well as to give adequate professional and technical assistance.

Civil Defense officials approving the plan include: General Ernest Vandiver, Director of Civil Defense; Brig. Gen. Frank A. Kopf, Deputy Director of Civil Defense; Charlie T. White, Assistant Deputy Director; H. R. Yandle, Public Affairs Officer; the three Area Directors, Harry U. Jackson, Cuthbert; M. L. Leggett, Macon; Jerry Cauble, Atlanta, and Dr. T. F. Sellers, Director of Georgia Civil Defense Health Services.

It is firmly believed that Civil Defense is no temporary measure but is here to stay if we are to survive. Public apathy today in Civil Defense is more apparent than real. It appears to exist only because of fear and lack of concrete information. The needed information is now being composed and distributed as rapidly as possible but until such time when sufficient material is available for public consumption, it is the duty of the physician to keep himself informed. By virtue of his profession the physician cannot escape his responsibility for leadership. He should volunteer for his duty in local administration of Civil Defense Health Services. Continuing releases will further clarify the responsibilities of the physician in the improvised hospital systems and in the Civil Defense Volunteer Medical Services Corp.

The Ultimate Aim of VOLUNTARY *Prepayment* MEDICAL CARE PLANS

W. S. DOROUGH, M.D., Atlanta

What is the ultimate aim of the Prepayment Medical Plan of Georgia? The answer to this question depends on the answers to three other paramount questions, namely, (a) what are the needs of the low income group; (b) what is the ability of this group to pay for coverage; and (c) do we, as a profession, really want to meet the needs of this group?

The social trends and the presence of this very real need for help from this group are changing our social thinking. The increase of costs in the diagnosis, treatment, and care today has made it mandatory that we offer some help to this group. While the profession does not want to foster the principle of paternalism advocated by some, we do want to give this group of citizens adequate medical care at a price that they can afford. Social changes are affecting our way of life and the future, and we must do our part in shaping these changes for the good of all. The voluntary plans are doing their part in answering a portion of the overall picture of our future which is being jeopardized by those in Washington, who are still using the phrase "for the public interest" over and over again to further socialize our way of life.

We have reached the 38th parallel of our campaign, but that campaign is not closed or over. There are still those "misguided planners" or "politically ambitious office holders" who, inadvertently or intentionally, are imperiling our most precious concepts of life. The American economic system is in greater peril today than at any other time in our history. The doctors of America have done much in making the people see what is taking place under the guise of "public interest" and "public welfare". We cannot sit back now and wait until something else comes up. We have answered the challenge, partially, but we must move forward always with a stick in hand so that the serpent will

Read before the Medical Association of Georgia in annual session, Augusta, April 19, 1951.

not dare to raise it's head again. While we are watchful of changes not in accord with our opinions, we must fully recognize these changes in social trends and do our part in guiding them into sane channels which will improve the lot of all. We cannot close our eyes to these inevitable changes.

The voluntary prepayment plans have performed a miracle in this country up to this time, but, as we all know, they are not ideal and have not reached their ultimate goal. The public has been, and is being, aroused to the fact that the health of the individual and that of his family are as important as the well-being of his car, his cow or his television set. This awareness of the need to make plans to protect the family economy in time of illness will mean more to the future economics of the doctor, individually, and the public in general than any other force in the history of medicine. The voluntary medical plans should move forward in an orderly fashion and in accordance with the experience gained, and actuarial statistics accumulated. We must keep in mind that the insurance benefits offered, or paid out, must be in keeping with the premiums charged. The greater general coverage of the people of our state, the greater will be the benefits paid out, and the greater number of medical conditions that can be included in the schedule. "The Lord helps those who help themselves" and we must help them to help themselves by educating them to realize their responsibility for their health. The doctor, while thinking of his own economics, must of necessity, be willing to adjust his fees to fit the economic or financial status of the patient. Too many of our doctors are building up concepts of what they can and cannot afford to do without giving enough consideration to what the patient can afford to pay. Let's keep our profession, a true profession and not make it a trade! We can move forward in meeting the problems of today, only, if we stand united as a group and have a sincere desire to face the realities and meet them. "Rugged individualism" and "high self evaluation of professional services" may have their virtues, but have no place in combatting the forces against us or meeting the problems involved. One charge beyond the patient's ability to pay can offset the good will engendered by many hundreds of charity services rendered.

The participation of the doctors in the plan is most essential. The goal of equitable fees for services rendered will eventually be reached and the forebearance of the members of the profession must be had until that time is reached. It would not be amiss, if our medical schools would include lectures in their curriculum on "ethical medical economics" with emphasis placed upon the service rendered suffering humanity in contradistinction to the money that can be made out of it's practice. Glamourize *service* rather than high economic and social levels to be attained! This would do much to bring medicine back to its revered position as a profession and forestall the trend toward a trade. These thoughts must be kept in mind in planning for the future on a sound basis.

The aim of all insurance plans ultimately is to cover all illnesses and medical expense in the low income group, and possibly to make co-insurers of the income group just above. This can be accomplished through education of the public, the insuring agencies, and last but not least, the members of the medical profession. It calls for sacrifice on the part of all three groups at this time, but there is no other way to reach our goal. As one labor leader has said, "the future of our free society depends on the voluntary assumption of social obligations by the major elements within society." This is so true! We, of the profession, must do our part. We must cooperate in meeting the needs of the low income group; we must remember the greater the spread of coverage in our state, the greater the insurance benefits that can be offered; and we must remember that the income of the low income group is just so much and the inroads made on this income by cost of living, social security, taxes and other insurance that must be carried are heavy. The income will spread just so far and no further!

It is now time for us, as member of the profession, to sit down and do some soul-searching, introspective thinking and reaffirm our will and desire to practice our profession according to the tenents of the Hippocratic Oath, which has stood the test of time. When this is done, we can go forward to reach the ultimate aim of the voluntary plans in meeting the real need of a majority of our citizens in procuring adequate medical care within their ability to pay. We must progress in a sane manner and on a sound financial basis. It is up to us! Will we meet the demands necessary to reach these aims?

478 Peachtree, N. E., Atlanta.

Millions Get Free Care

Uncle Sam provides medical and hospital care for more than 25 million persons, according to the Washington *Post*.

Included are:

18,500,000 veterans.
2,500,000 members of the armed services and families.
2,500,000 employes, in case of illness or injury in line of duty.
100,000 merchant seamen.
400,000 Indians, Eskimos and other natives of Alaska.
50,000 civilians in the Panama Canal Zone.
30,000 Coast Guardsmen and families.

The Association

Meeting of the Council of the M.A.G.

ACADEMY OF MEDICINE, *Atlanta*
January 20, 1952

Chairman, W. G. Elliott, presiding.

Present were: Drs. W. F. Reavis, C. F. Holton, David Henry Poer, Lee Howard and Charles T. Brown, First District; Fred E. Murphy, Second District; W. G. Elliott and Guy J. Dillard, Third District; J. W. Chambers and Clarence B. Palmer, Fourth District; Marion C. Pruitt and John W. Turner, Fifth District; H. D. Allen, Jr., Sixth District; D. L. Wood, Seventh District; J. A. Leaphart, Eighth District; Bruce Schaefer, Ninth District; H. L. Cheves and J. Victor Roule, Tenth District; Mr. John A. Dunaway, Attorney for Association and Mr. Sid Wrightsman, Jr., Executive Secretary.

All necessary items of business were considered and action taken as follows:

1. The minutes of the Council meeting on Sept. 23, 1951 and the Executive Committee of Council meeting on Oct. 26, 1951 were read and approved.

2. Reports were made by:

(a) Dr. Spencer A. Kirkland and Dr. T. F. Sellers for the Committee on Public Policy and Legislation. Council approved the activities of this Committee in the work done to obtain passage of the Marital Bill with a three-day waiting period and the Practical Nurses Bill. Council also requested that this Committee begin work now on a bill to control all of the healing arts, and a basic science bill for introduction in the 1953 Session of the Legislature. Attention was called to the Advisory Committee that has been set up to assist this Committee, having a representative from each district.

(b) Dr. W. S. Dorough, Chairman, Committee on Insurance and Economics, reported the activities in that field. He announced that a meeting of the Committee had been scheduled for Wednesday, January 30. Dr. Dorough then received a unanimous vote of commendation by Council for his untiring efforts as chairman of the above-named committee.

3. The work of the Committee on Rural Health of the AMA was discussed and the fact brought out that no such committee has yet been appointed in Georgia to carry out this very important work. Upon request President Reavis appointed a Committee on Rural Health to be composed of Dr. J. B. Kay, Byron, Chairman, Dr. W. D. Hall, Calhoun and Dr. J. C. Brim, Pelham.

As Chairman, Dr. Kay was designated by Council to attend the Seventh Annual Rural Health Conference of the AMA to be held in Denver, February 29 and March 1, with necessary travel expense and $15.00 per diem authorized for his tour of duty.

4. Dr. Tully T. Blalock, Atlanta, was appointed, by President Reavis, to attend a special meeting of the American Medical Education Foundation for state representatives, to be held in Chicago, Sunday, February 17, his expenses to be paid by the AMA.

5. District and county society problems were discussed at length, and the fact brought out that some districts, such as the Fourth, meet regularly and smoothly, while others, such as the First, have difficulty doing so. Twenty county societies have less than five members, and the withdrawal of their charters was considered. Each Councilor was furnished a list of such counties in his district with the request that he attempt to consolidate them with adjoining county medical societies. The Secretary was authorized to call a meeting of district and county society officers at some time during the Annual Session of the Association to discuss these problems.

6. Councilors were requested to report on the status of the motion picture projectors in their districts.

7. Details of the Annual Session were presented for information. All arrangements were reported to be progressing satisfactorily. The Executive Secretary was authorized to arrange a breakfast or other suitable event, for the commercial exhibitors, at a cost of not more than $200.00.

8. The appointments of Dr. J. D. Martin, Jr., Atlanta, to the Editorial Board of *The Journal,* and of Dr. Charles W. Hock, Augusta, and Dr. Thomas A. McGoldrick, Jr., Savannah, to be Contributing Editors, were unanimously approved. The changes in *The Journal* were discribed by the Editor.

9. Dr. Marion C. Pruitt, Chairman, Committee on Medical Defense, made a report of the activities of this Committee which was discussed by Mr. John A. Dunaway, Legal Counsel.

10. The resignation of Mrs. John Maltbie, Secretary of Public Relations Department, was accepted with regret. Mr. Wrightsman, in cooperation with Dr. Stephen T. Brown and the Secretary, was instructed to secure the services of a satisfactory replacement.

11. The last regular meeting of Council was set for 11:00 A. M., May 11. The report of the Committee on Auditing and Appropriations for next year will be made at that time.

12. Adjournment.

LETTERS

(Editor's Note: *The first two letters following, both having to do with an article appearing in the December, 1951, Journal, should be read as a unit.)*

Atlanta, Georgia
January 18, 1952

To the Editor:

An excellent article by Dr. Henry Rives Chalmers was published in the December, 1951, issue of the *Journal.* It is worthwhile to direct special attention to our membership to the valuable formulations given therein, with which most of his psychiatric colleagues would fully concur.

Nevertheless, on page 507 he makes the statement, "There is a prevalent feeling among the physicians of today that it is best not to inform a patient of a hopeless prognosis," and Dr. Chalmers goes on to urge us to be more frank and open in the matter. In general, we would concur also with this advice, but feel that a certain warning note needs to be sounded.

To one whose medical career has spanned the revolutions in the treatment of diabetes, syphilis, pernicious anemia, general paresis, Addison's disease, streptococcus meningitis, pneumonia, and many, many other conditions, there appears to be some danger of error on the pessimistic side. As each one of the above conditions was brought under control, many patients who formerly had had a hopeless prognosis, were no longer to be considered hopeless. Only where one is absolutely certain of the outlook, and when the diagnosis and prognosis has been amply confirmed by competent consultants, should a wholly pessimistic outlook be assumed. Even then, the knowledge should be imparted with a certain conservatism and humility. Maybe by tomorrow some ingenious worker in the medical field may get the bright idea that will change everything. Perhaps even someone who reads this article may be the fortunate one to see things in a new and hopeful way that may change the outlook from bad to favorable.

Especially in the field of mental illness should one be reluctant to be too hopeless. It seems to us that the general practitioner is relatively unaware of the tremendous resources at the disposal of the properly trained psychiatrist of today. There is little clarity of thinking about these matters even among psychiatrists, as the field has become so extensive that it is very difficult for one person to grasp all of it. This leads to quite narrow specialization on the part of many psychiatrists who settle down to doing shock therapy, non-directive therapy, group therapy, psychoanalysis, psychobiology, semantics, psychodrama, psychosurgery, or some other of many specialized techniques. Being narrow in training and outlook, they tend to condemn all forms of treatment which do not conform to their own ideas and background. This leads them to try to fit every patient, however, individualized his illness may be, into the same Procrustean bed of their single favorite modality which in turn leads to confusion in their own minds and in the minds of those with whom they talk. It leaves little room for variation of approach to utilize what is known to be valuable in other modalities. Recently, a surgeon asked me if it were true that one of my esteemed colleagues "gives too much shock treatment, as some of my friends say?" I replied that the psychiatrist in question is an honest, ethical physician, as well trained in psychiatry as most of the other specialists in the field in Atlanta, and while he gave shock therapy in cases where I would not do so, nevertheless, he has a perfect right to his viewpoint. Sometimes the immediate relief of depression is more important than long term psychotherapy. Different psychiatrists will accent these factors differently, and only a long term analysis could give a final answer.

Perhaps a case would illustrate. A girl of nineteen years was admitted to a mental hospital sixteen years ago. She suffered from a convulsive disorder which was thought by the hospital authorities to be idiopathic epilepsy, but her own physician thought the seizures were functional. By dint of intensive psychotherapy and a little medication, the seizures were brought partially under control. She was encouraged to complete nursing training, which she did. On completion of training, she lost close contact with her therapist and over a period of several years, complicated her personal life by marriage and divorce. In the meantime, her seizures had gotten completely out of control and her personality had developed along such lines that she could not hold a job anywhere. She was persona non grata in all local hospitals. She then sought further psychother-

apy, and under very solicitous care improved a good deal but still could not hold a job. In her thirty-fifth year, the family consulted another psychiatrist who admitted her to a private sanitarium where she received convulsive shock therapy. Following this, there was marked improvement and she was able to again secure employment as a private duty nurse. Many of us who had treated her before wished we had had the ingenuity to solve her problems.

This brings up another, and a minor, criticism of Dr. Chalmers' paper. On page 505 he says, "We have come to define psychiatry as the Science of Interpersonal Relationships."

Psychiatry is not a Science. It is an art in which a great many sciences are employed and applied. The following is a partial list of them:

Psychology, Biology, Psychobiology, Sociology, Ethnology, Semantics, Chemistry, Physiology, Biochemistry, Neurology, Endocrinology, Psychoanalytic Theory, Statistics, Encephalography, etc., etc.

The best psychiatrist is he who is first of all loving and kind to his fellow man, and who has prepared himself as thoroughly as possible in all these different fields, so that he has for his guidance an intimate familiarity with all of them and is not dependent upon hearsay for his opinion.

Dr. Chalmers is to be commended for his splendid paper. We hope and trust that the above comments will in no way detract from its usefulness, but rather serve to clarify and illustrate a few points which, after all, would perhaps not be adequately covered in so short a space.

Sincerely yours,
LAWRENCE F. WOOLLEY, M.D.

Atlanta, Georgia
January 31, 1952

To the Editor:

Dr. Woolley's letter brings some confusion as regards the intent of my statement. I do not make any reference to the care and judgment which every physician is expected to exercise in the formation of his own professional opinion. I merely want to make it clear that honest and forthright expression of opinion is a constructive approach to the doctor-patient relationship, and I feel that the physician can be trusted to determine the manner in which this opinion will be expressed. The statement "Psychiatry is not a science" reflects a fundamental professional difference between Dr. Woolley and myself as regards our approach to psychiatric treatment. I feel very deeply that psychiatry has now attained sufficient maturity to be termed a science. We have a definite body of knowledge concerning human emotions and their relationship to the total life experience of the individual. From this body of knowledge we can define basic principles and procedures in treatment and this body of knowledge serves as the foundation for scientific investigation and research.

I appreciate very much Dr. Woolley's willingness to discuss my paper and am glad to have a chance to clarify my own feelings as regards these points in question. I feel that more open and public discussion of the role of psychiatry in the field of medicine today can lead to a much better understanding between members of the psychiatric profession and doctors in other areas of the medical field. I welcome such free and open discussion.

Sincerely yours,
RIVES CHALMERS, M.D.

Emory University, Georgia
February 4, 1952

To the Editor:

I have noted with a great deal of interest the vast improvement in THE JOURNAL, and I am sure it is a credit to the work of the staff.

Most sincerely,
J. D. MARTIN, JR., M.D.

Atlanta, Georgia
February 4, 1952

To the Editor:

I would like to express my congratulations on your many changes in THE JOURNAL.

Sincerely,
LESTER A. BROWN, M.D.

Atlanta, Georgia
February 4, 1952

To the Editor:

Just a note to congratulate you and THE JOURNAL on the very pleasing new format, styling, etc. I do believe that the State Association membership should, and will, be pleased.

Warmest personal regards.

Sincerely yours,
IRVING L. GREENBERG, M.D.

Atlanta, Georgia
February 5, 1952

To the Editor:

I want to congratulate you on the new JOURNAL and its new modern dress. You have done an excellent job in creating the new changes that make a better appearing magazine as well as more readable departmental features.

Best wishes for a most successful year.

Sincerely yours,
MORGAN RAIFORD, M.D.

PERSONALS

Dr. Charles T. Brown, Guyton, has been named chairman of the Red Cross blood program in Effingham County.

Dr. Braswell E. Collins, Waycross ophthalmologist, was elected president of the Atlantic Coast Line Railroad Surgeons' Association at in annual meeting in Charleston, S. C., last month.

Dr. Joe G. Crovatt, of Camilla, resumed practice on January 2. His office had been closed for some

time while he underwent and recuperated from an operation.

Dr. John A. Duncan, formerly of Augusta, has opened a practice in Rochelle, with offices in the Brown Building.

Dr. Frederic E. B. Foley, St. Paul, Minn., urologist, is spending the winter season in Savannah, and while there he is associated in practice with *Dr. Irving Victor.*

Dr. Billy S. Hardman, of Gainesville, announces that he will limit his practice to obstetrics and gynecology.

Dr. Frank Hoffman in January opened offices at 4 West Liberty Street, Savannah, for the practice of ear, nose and throat treatment. A native of Savannah, Dr. Hoffman was graduated from the Medical College of Georgia.

Dr. J. F. Hooker, Waycross, has been named chairman of the medical advisory committee for Ware County's Red Cross blood program.

Dr. William A. Hopkins, of Atlanta and Emory University Hospital, has recently passed the following Boards: American Board of Surgery, American Board of Thoracic Surgery, American College of Chest Physicians and American College of Surgeons.

Dr. and Mrs. J. M. McElveen, of Brooklet, held open house at their home on January 13 in observance of Dr. McElveen's 75th birthday anniversary. The doctor has practiced in the Brooklet community for 50 years.

Dr. W. Frank McKemie, of Albany, has been named chairman of the medical advisory committee for Dougherty County's new defense blood program.

Dr. John Marvin McKenzie, of Thomaston, who has practiced for 50 years in his native county, Upson, celebrated his 75th birthday anniversary on February 9.

Dr. Edward S. Marks, of Marietta, has been appointed chairman of the Red Cross Blood program in Cobb County.

Dr. H. D. Meaders, of Newnan, has limited his practice to obstetrics, gynecology and abdominal surgery.

Dr. and Mrs. John W. Mobley, of Thomasville, were injured in an automobile accident on January 6 at Ridgeland, S. C., while driving home from a hunting trip in North Carolina. They were hospitalized first at Ridgeland, then at Savannah and finally at Thomasville. Dr. Mobley escaped with slight injuries. Mrs. Mobley received a crushed and broken foot, a broken arm and should injuries, but is expected to recover fully in time.

Dr. Fenwick T. Nichols, Jr., has returned to Savannah to resume the practice of internal medicine at his offices at 102 East Gwinnett Street. A Navy veteran of World War II, Dr. Nichols was recalled to active Navy duty in August, 1950, and only recently was discharged.

Dr. J. C. Patterson, of Cuthbert, in January addressed the Lions Club of that city, describing the trip recently made by himself and Mrs. Patterson to Hawaii.

Dr. David Henry Poer, of Atlanta, editor of the JOURNAL of the MAG, has been appointed a member of the advisory committee of the American Medical Writers' Association.

Dr. Carter Smith, of Atlanta, was one of the principal speakers at the R. Holmes Mason Memorial (Dental) Clinic held in Macon January 17 by the Central District Dental Society.

Six Macon physicians in January moved into new offices: *Drs. Milford B. Hatcher* and *James Caldwell* to 781 Spring Street, *Dr. Samuel E. Patton* to 797 Spring Street, and *Drs. W. A. Williams, Charles Benton* and *E. L. Fry* to the Hatcher Building.

SOCIETIES

Georgia Medical Society at its meeting in Savannah on January 8 heard Dr. Susan C. Dees, chief of the pediatric allergy clinic at Duke University, speak on "Allergy in Pediatric and General Practice," and Drs. Thomas A. McGoldrick, Jr., and Peter L. Scardino give a case report on "Total Adrenalectomy." Dr. T. A. Peterson was named chairman of a committee to make plans for the society's annual "President's Dinner."

Fourth District Medical Society has as its officers for 1952 Dr. J. Morgan Kellum, Thomaston, president, and Dr. George W. Brown, Griffin, secretary-treasurer. They were elected at the quarterly meeting of the organization at Newnan on December 11.

Tenth District Medical Society is scheduled to meet at the Athens Country Club, Athens, on February 28 at 3:30 p. m. A symposium on heart disease will be held.

Emanuel County Medical Society at its meeting on December 26 unanimously elected its senior member, Dr. D. D. Smith, as chief of staff of the new County Hospital which is scheduled to open in Swainsboro soon. Rule, regulations and by-laws to govern the hospital staff also were adopted. Formation of committees was postponed until after a proposed meeting with the county Board of Commissioners and the Hospital Authority.

Muscogee County Medical Society on January 22 installed as its 1952 officers: Drs. Kenneth Munn, president; George Hutto, vice-president, and E. J. Cain, secretary-treasurer. Drs. Hutto and Cain also

were named as delegates to the MAG convention. The meeting was held at the Standard Club, Columbus.

Dr. Munn appointed as committee chairmen for the year: Drs. William Cook, entertainment; James Elkins, constitution and by-laws; George Schuessler, censor; Hugh Bickerstaff, public health and legislation; Dave Berman, public relations; S. A. Roddenberry, program; Guy Dillard, mental hygiene; and Hutto, civil defense.

Principal speaker at the meeting was Dr. Carter Smith, of Atlanta.

South Georgia Medical Society at its meeting on January 8 at the Valdosta Country Club elected as its officers for 1952: Drs. Joyce Mixson, president; J. G. Austin, vice-president, and A. G. Little, secretary-treasurer. Appointed as members of the society's grievance committee were Drs. Fred Clements, of Adel, Alton Johnson and A. F. Saunders. Accepted as new members of the organization were Drs. Van B. Bennett, Sybil Corbett Bennett and J. T. Giles, all of Valdosta.

Sumter County Medical Society has installed as its officers for 1952: Drs. Frank A. Wilson, III, of Leslie, president; Schley Gatewood, Americus, vice-president, and Henry R. Fenn, Americus, secretary-treasurer. They were elected at the society's meeting at the Windsor Hotel, Americus, on January 17. Dr. J. C. Logan, of Plains, who in April will have practiced medicine for 50 years, received the special congratulations of the group at this meeting.

Ware County Medical Society members were guests of the dentists of Ware County at a supper meeting held at Hotel Ware, Waycross, on January 3. Dr. J. F. Hooker, Bloodmobile chairman, reported on the forthcoming arrival in the county of the Red Cross Bloodmobile. Dr. H. T. Adkins, president, presided.

Whitfield County Medical Society at its meeting in Dalton in January elected as its officers for 1952 the following: Drs. Paul Bradley, president; Albert Boozer, vice-president, and Hubert King, secretary-treasurer. Dr. Lloyd Wood was picked as chairman of the society's board of censors and also was chosen as delegate to the 1952 MAG meeting, with Dr. H. L. Erwin being named alternate delegate. The group voted to serve as host to the Seventh District Medical Society at its annual meeting, the date to be designated later.

ANNOUNCEMENTS

The Atlanta Graduate Medical Assembly, sponsored by the Fulton County Medical Society, and the twentieth graduate assembly of The Southeastern Surgical Congress will convene simultaneously on March 10, 11, 12, and 13, at the Atlanta Biltmore Hotel, Atlanta. One registration fee of $15 will permit admission to the scientific sessions of both assemblies, and further information may be obtained from Mrs. S. R. Roberts, Executive Secretary, Atlanta Graduate Medical Assembly, 768 Juniper Street, N. E., Atlanta.

The fifth annual postgraduate course in diseases of the chest sponsored by the *Council on Postgraduate Medical Education* and the Pennsylvania chapter of the *American College of Chest Physicians* and the Laennec Society of Philadelphia will be presented at the Warwick Hotel, Philadelphia, Pa., March 24-28.

The *Southeastern Allergy Association* will hold its seventh annual meeting at the Bon Air Hotel, Augusta, March 21-22.

The *Piedmont Proctologic Society* will hold a meeting in Charlotte, N. C., on March 29.

The annual meeting of the *American Goiter Association* will be held at the Chase Hotel, St. Louis, Mo., May 1-3.

The 30th annual scientific and clinical session of the *American Congress of Physical Medicine* will be held August 25-29 at the Roosevelt Hotel, New York City. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, annual instruction seminars will be held.

PROFESSIONAL

Officers, executive committeemen and directors of *Physicians Service, Inc.*, which operates the Blue Shield insurance plan, were elected at meetings of the board of directors and the membership held at the Country Club, Columbus, on January 23.

Named as officers were: Dr. Luther Wolff, Columbus, president of the board of directors; Dr. A. E. James, Albany, vice-president; Albert W. Stubbs, Columbus, secretary, and Dr. George Schuessler, Columbus, treasurer. Elected to the executive committee were Dr. Wolff, Dr. Schuessler and Dr. John Bush.

Chosen as directors for three-year terms were: P. A. Keenan, Jr., Albany; Dr. Harry D. Pinson, Augusta; Dr. J. C. Patterson, Cuthbert; Dr. John A. Simpson, Athens; Dr. C. D. Whelchel, Gainesville; Dr. David R. Thomas, Augusta, and Dr. A. G. Little, Jr., Valdosta.

Selected as directors for two-year terms were Dr. C. L. Howard, Pelham, and Dr. H. B. Nunnally,

Monroe, and for one-year terms, Dr. A. P. Ohlmacher, Baxley, Dr. Paul T. Scoggins, Jefferson, and Dr. Raymond Smith, Hahira.

The *Atlanta Eye, Ear, Nose and Throat Society* has elected as its officers for 1952: Drs. F. P. Calhoun, Jr., president; W. C. Hathcock, vice-president, and James T. King, secretary.

Dr. E. C. Demmond was installed as president of the *Savannah Society of Obstetricians and Pediatricians* at a meeting of the organization on January 10 at the home of Dr. H. J. Morrison, retiring president. Dr. E. N. Gleaton was named president-elect of the group and Dr. Richard L. Schley, Jr., as secretary-treasurer.

MISCELLANY

Six Georgia physicians are members of the current state General Assembly. In the Senate are: Drs. E. M. Lancaster, Shady Dale; Marcus Mashburn, Sr., Cumming, and William H. Wall, Blakely. In the House of Representatives are: Drs. E. F. Griffith, Eatonton; Wallace K. Smith, Pembroke, and Gordon S. Sumner, Sylvester.

Research and teaching institutions throughout the United States and Canada recently were awarded $1,775,393 in March of Dimes funds for further polio studies and professional education, the National Foundation for Infantile Paralysis announces.

One of these awards went to the Georgia Warm Springs Foundation, of which Dr. Robert L. Bennett is director of physical medicine. It was for $14,490 and its purpose is to increase the number of skilled persons required in carrying on research and in providing adequate care for patients.

HOSPITALS

Preliminary plans for the new $1,000,000 hospital to be erected in Brunswick under the Hill-Burton Act by the city of Brunswick and Glynn County were approved on January 8 by the Glynn County Medical Society and turned over to the city and county commissions for their inspection and action.

The hospital is planned as a three-story, 75-bed structure, and is so designed that the capacity could be easily increased to 125 beds with the addition of a wing.

A comparative report of finances of *Brunswick City Hospital* for the period 1945-51 by Dr. M. E. Winchester, administrator, shows that the deficit has been reduced from a high of $38,162.26 in 1948 to $21,229.75 for the year ending last June 30. The 1950-51 deficit is the lowest in many years, and that for 1951-52 should be considerably lower, for the deficit for the half-year ending Dec. 31, 1951, was only $5,904.04.

Meanwhile, operating expenses have increased from $187,176.35 in 1945-46 to $249,518.70 in 1950-51, and income from $159,725.54 to $228,-288.95 in the same period. Dr. Winchester has been administrator of the hospital since March, 1949.

The *Chattooga County Hospital* in Summerville was opened to the public on January 15. Thirty beds and 11 bassinets are now available for use, but Administrator Herbert Gilkeson says that if it becomes necessary the hospital can have as many as 48 beds.

Superintendent of nurses at the institution is Mrs. Ruth Allen, formerly of Battey State Hospital. Members of the medical staff are Drs. W. T. Gist, R. N. Little and H. A. Goodwin, all of Summerville, and Drs. W. U. Hyden, J. J. Allen and G. H. Little, all of Trion.

Plans for a new 50-bed $675,000 hospital in Cordele have been approved by the Crisp County Medical Society, which is actively supporting the project. The structure will be located in the Northern Heights section of the city.

Dr. S. Eugene Sims, formerly a member of the staff of Eatonton's *Jordan Hospital,* has resigned to accept a residency in surgery at Atlanta's *Grady Hospital.*

In reporting to the health division of Atlanta's Community Planning Council on January 16, Dr. L. Minor Blackford, chairman of the committee on chronic diseases, said that additional hospital facilities in the Atlanta area are sorely needed for the treatment of such diseases.

He said this need can best be met through construction of a new *Grady Hospital.* Dr. Blackford described the present hospital as a "fire trap" and urged the rapid completion of the long-planned new Grady Hospital. Officials of Grady later denied that the buildings there are "fire traps."

Dr. C. L. Ridley, who for more than 18 years had been superintendent of *Macon Hospital,* on February 1 became its medical director, a newly created position. Wiley Jackson, who had been assistant superintendent, was appointed superintendent.

In January Dr. Ridley announced that four physicians had been added to the medical staff of the hospital. They are Drs. Lowrey Davenport, J. T. Hogan, James Caldwell and John DuPree. The executive committee of the staff comprises Drs. S. E. Patton, A. M. Phillips, W. C. Boswell, John I. Hall and C. N. Wasden. Dr. J. C. Anderson is president of the staff, Dr. R. G. Newton vice-president, Dr. Charles Rumble secretary, Dr. Tom Ross chief of staff and Dr. Milford B. Hatcher vice-chief of staff.

Negro doctors in Macon were assured by Mayor

Lewis Wilson on January 21 that they will practice at the expanded *Macon Hospital* whether or not the city gets federal funds and whether or not the Bibb County Medical Society admits Negroes to membership.

Mr. Wilson gave the assurance to the Macon Interracial Council, but Negro council members said they wanted a promise in writing before supporting a bond election for hospital additions in case federal funds are not granted.

The mayor told the group that present hospital plans call for 147 beds for Negroes as compared to the present 88, ten Negro interns and residents, a nurses' home for 72 girls, three delivery rooms, doctors' lounges and other "separate and equal facilities."

(EDITOR'S NOTE: On January 19 a group of Brunswick Negro residents who asked the city commission for a definite statement of policy regarding the use of the projected new hospital there by persons of that race were told by Mayor A. T. Harrison that he would introduce at a commission meeting a resolution calling for equal facilities in the hospital for white and Negro residents.)

Marietta's *Kennestone Hospital,* a little more than a year old, has been accredited by the American College of Surgeons following a recent inspection. William L. Harris, chairman of the Marietta Hospital Authority which operates the 105-bed structure, says the authority's chief goal in 1952 will be to eliminate the present $2,000 monthly deficit by increasing the average daily patient total from 55 to 80.

New officers of the medical staff of *Ware County Hospital,* Waycross, are: Drs. Vilda Shuman, president; W. C. Calhoun, vice-president, and Clayton M. Massey, secretary.

To determine "the very best means of providing high-quality hospital care at the lowest possible cost to the public" was the theme of a discussion held in Atlanta January 28 by the Commission on Financing of Hospital Care. Set up by the American Hospital Association, the commission is holding seven sectional meetings throughout the country to inaugurate a two-year study of hospital financing.

At the Atlanta discussion, Robert F. Whitaker, superintendent of Emory University Hospital, assisted Dr. Gordon Gray, president of the University of North Carolina, and Graham Davis, former research director of the Kellogg Foundation, in conducting an open forum on the general topic.

DEATHS

ANDREWS: *Dr. Agnew Andrews,* 59, of Tifton, died January 10 in an Atlanta hospital after a brief illness. Son of the late Dr. T. H. Andrews, of Cuthbert, he was graduated from Emory University School of Medicine, later took postgraduate work in eye, ear, nose and throat at New York Polyclinic. Practiced in Thomasville until 1937, when he moved to Tifton. Was member of Alpha Kappa Kappa.

TIDMORE: *Dr. Joseph C. Tidmore,* 41, of Dawson died January 18 in an Atlanta hospital after a five-day illness. A native of Moundville, Ala., he was graduated from Emory University School of Medicine in 1934. After interning at Grady Hospital, Atlanta, he opened his Dawson practice in 1937. Was chief of staff of Terrell County Hospital, county physician and a member of the board of education.

SCHOOLS

Dr. Paul B. Beeson, associate dean of the Emory University School of Medicine and chairman of its department of medicine, has been appointed Ensign professor of medicine at Yale University and will assume his new duties in April. He will succeed the late Dr. Francis G. Blake, chairman of Yale's department of internal medicine, who would have retired in June after 30 years as a member of that faculty.

A member of the Emory faculty since 1942, Dr. Beeson holds the titles of professor of medicine and associate professor of bacteriology. He is noted for investigations of infectious diseases and clinical physiology. From 1940 to 1942 he was physician-in-chief of the American Red Cross Hospital in England. Holder of M.D. and master of surgery degrees from Canada's McGill University, Dr. Beeson in his new post also will be physician-in-chief of the University Service in the Grace-New Haven Community Hospital.

Students and professors of the Medical College of Georgia, as well as their families and guests, are enjoying varied programs of entertainment this year through the efforts of a college art series committee composed of five faculty members and one or two representatives of each of the four medical classes.

The 1951-52 series comprises three concerts, by such artists as the Juilliard String Quartet and the Aeolian Trio; two programs of plays (by the London Repertorie Theater and the Touring Players); and six films, most of them foreign. Experimental short films also are included on the program.

Dr. A. Calhoun Witham, formerly of Chamblee, on January 1 joined the staff of the Medical College of Georgia as assistant professor of physiology. Dr. Witham holds the A.B. degree from Emory University and the M.D. from Johns Hopkins, and recently has studied at the University of London.

Dr. Davison Honored

Several friends of Atlanta's Dr. T. C. Davison honored him with a testimonial dinner given on the occasion of his "65th-plus" birthday on November 14 at the Capital City Club. At that time Dr. Davison read the following poem ("Building the Bridge," by Will Allen Dromgoole), which he regards as perhaps his favorite one:

An old man, going a lone highway,
Came, at the evening, cold and gray,
To a chasm, vast, and deep, and wide,
Through which was flowing a sullen tide.
The old man crossed in the twilight dim;
The sullen stream had no fears for him;
But he turned, when safe on the other side,
And built a bridge to span the tide.
"Old man," said a fellow pilgrim, near,
"You are wasting strength with building here;
Your journey will end with the ending day;
You never again must pass this way;
You have crossed the chasm, deep and wide—
Why build you the bridge at the eventide?"

The builder lifted his old gray head:
"Good friend, in the path I have come,"
He said,
"There followeth after me today
A youth, whose feet must pass this way.
This chasm, that has been naught to me,
To that fair-haired youth may a pitfall be.
He, too, must cross in the twilight dim;
Good friend, I am building the bridge for him."



DR. T. C. DAVISON

For the second successive summer a course in medical libraries will be offered at Emory University this year—from July 24 to August 29. Its instructor will be Miss Mildred Jordan, librarian of the Calhoun Medical Library of the Emory School of Medicine.

Arranged at the suggestion of the national Medical Library Association, the course has as its purpose giving an introduction to medical library resources and their use in medical education, medical research and the care of patients. It is open to those who have the requisite background of training and experience to profit from the course and who wish to complete the requirements for certification as medical librarians. Further information may be obtained from the director of the Division of Librarianship at Emory.

Dr. R. B. Greenblatt, professor of endocrinology at the Medical College of Georgia, in January participated in meetings held by the Southwestern Ohio Society of General Physicians in Cincinnati, Ohio; at the Elizabeth Steel Magee Hospital in Pittsburgh, Pa., and at the New York Academy of Science. He presented papers on "Management of the Menopause," "Management of Functional Uterine Bleeding" and "Treatment of Lymphogranuloma Venereum and Granuloma Inguinale and Antibiotics."

BOOKS

Book Reviews

THE SPECIALTIES IN GENERAL PRACTICE: Edited by Russell L. Cecil, M. D., Professor of Clinical Medicine, Emeritus, Cornell University Medical College, New York City. 818 pages with 470 figures. Philadelphia and London: W. B. Saunders Company, 1951. Price $14.50.

This new book, as stated in its title, discusses "The Specialties in General Practice." Contributors include 14 well-known teachers in the medical field. The subjects discussed include minor surgery; orthopedic surgery; fractures and dislocations; urology; diseases of the anus, rectum and colon; gynecology; obstetrics; pediatrics; ophthalmology; diseases of the nose and throat, diseases of the larynx, bronchi and esophagus; otology; dermatology and syphilology;

ADD MEMBERSHIP

The name of Dr. Ford Ware, Bankers Insurance Building, Macon, was inadvertently omitted from the membership roster of the Bibb County Medical Society published in the December JOURNAL. Dr. Ware is an active member of the Bibb Society and the MAG.

and psychiatry. References for all these subjects are given at the end of each chapter. Numerous illustrations add to the teaching value of the book, and to the intelligence of any of its readers. The index for the book appears to be comprehensive.

Dr. Cecil, long a teacher of medicine and author of one of America's best textbooks of medicine, has succeeded admirably in gathering material for and in editing this new book, a book which will be found most useful to all practitioners of medicine. Like his textbook of medicine, this book can be recommended without reservation.

EDGAR D. SHANKS, SR., M. D.

SURGICAL PRACTICE OF THE LAHEY CLINIC. The second volume of this excellent monograph now appears 10 years after the publication of the first volume in 1941. Essentially, it consists of a selected group of 80 articles written on surgical subjects by members of the Lahey Clinic Staff and published in various surgical journals. However, there is a fair sprinkling of articles that were written especially for this volume for the express purpose of rounding out the material about each of the 12 surgical divisions presented. These add materially to the value of such a volume for the average general surgeon.

The first section covers the surgical management of conditions of the thyroid gland and neck, and it is in this field that the senior author and other members of the staff have done much excellent work to establish sane and conservative methods of treatment. Almost in the same category, however, would be the sections on the stomach and duodenum, the small intestine, colon, sigmoid and rectum, and the biliary tract. Other sections include the esophagus, lungs and heart, the spleen, adrenal gland and pancreas, the breast, the pelvis, the bones and joints, the brain, spinal cord and nerves, anesthesia, and miscellaneous topics. Thus 23 organs or areas are carried in a manner designed to give the general surgeon a comprehensive coverage of all the usual and many of the rare conditions that he is called upon to treat.

Such a detailed analysis and summary of the surgical practice in a large clinic will prove of inestimable value to the student of surgery, regardless of the particular school of thought in which he has been trained. In its 1014 pages there are many excellent illustrations (784 on 509 figures) which add much to the clarity and understanding of the material presented. The book is well gotten up with type that is small, but easily read, and all other details have been taken care of in a very satisfactory manner. The volume has a definite place in the surgeon's library.

Books Received

CALLANDER'S SURGICAL ANATOMY: By Barry J. Anson, M.A., Ph.D., (Med.Sc.), Professor of Anatomy, Northwestern University Medical School; and Walter G. Maddock, M.S., M.D., F.A.C.S., Elcock Professor of Surgery, Northwestern University Medical School. New 3rd Edition. 1074 pages with 929 illustrations. Philadelphia and London: W. B. Saunders Company, 1952. Price $14.00.

A TEXTBOOK OF CLINICAL NEUROLOGY—With an Introduction to the History of Neurology: By Israel S. Wechsler, M.D., Clinical Professor of Neurology, Columbia University, New York; Consulting Neurologist, The Mt. Sinai Hospital, Montefiore Hospital and Rockland State Hospital, New York. New 7th Edition. 801 pages with 179 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $9.50.

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS: By Richard J. Plunkett, M.D., Editor, and Adaline C. Hayden, R.R.L., Associate Editor. This 4th edition of the standard guide to disease and operation recording for medical record librarians and physicians has been completely revised and brought up-to-date in keeping with medical progress.

Code numbers for acute and chronic conditions are made consistent, new heart diagnoses are included, diseases of the Hemic and Lymphatic systems are revised to conform to accepted terminology, the dental and tuberculosis sections are enlarged, and the section on operations includes new operative procedures used in skin grafts and cardiac surgery. Also, the supplementary terms are placed in one section and the disease and operations indexes are placed consecutively in the book.

In addition to these revisions, an International Statistical Classification of Diseases, Injuries and Causes of Death is included. These code numbers are cross-referenced to the "Standard" code numbers. 1034 pages with four illustrations. Philadelphia, New York, and Toronto: The Blakiston Company, 1952. Price $8.00.

102nd Annual Session, Medical Association of Georgia, May 11-14, Atlanta Biltmore Hotel

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI MARCH, 1952 NUMBER 3

Editorials

Lord, We Cry to Thee

Lord, we cry to Thee for help,
Only Thou canst heal our pain,
Out of deep distress we call:
O send us, Lord, send peace again.
We have sinned against Thy law,
We have failed to do Thy will;
Disobeyed Thy holy word,
O Lord, have mercy on us still.
Purge our souls of selfishness,
Cleanse our hearts of bitterness.
Lead us back to righteousness:
O Lord God, save us, save us still.
Lord, exalt Thy holy name,
Conquer evil by Thy power,
Let Thy righteous will prevail,
And reign victorious evermore.
O Lord, save us, save us still.

—ZWINGLI-DICKINSON

LOST *and* FOUND

Vital Work for Each Physician is Outlined by the American Medical Education Foundation

LOST: Adequate financial backing for the education of our future classes of medical students. Many of the country's medical schools are facing the loss of private endowments; the income from which has been dwindling with the rise of inflation. This means that planned medical education programs will have to be curtailed unless some other sources of income are forthcoming. Georgia's two medical schools are carrying heavy annual deficits which have to be made up by some source other than tuition. There are two possible directions from which this source may come. On one hand is the Federal Government; on the other, private voluntary contributions. Which shall it be?

FOUND: A means by which these deficits may be met without resorting to Federal aid. The American Medical Education Founda-

tion, organized in 1951, has already forwarded outright grants to Emory University and the University of Georgia Medical Schools of $22,000 each, and is anticipating much larger grants in 1952. The funds available will depend entirely on contributions from members of the medical profession and interested corporations. Every penny of money contributed will go directly to the medical schools. All expenses of the foundation are being met by the American Medical Association. Gifts may even be earmarked for any particular school. These earmarked gifts will be forwarded to the school over and above whatever grant is made from the general fund.

It is essential that we do all in our power to keep Federal controls from the Medical Schools. The Medical Education Foundation affords a real means for doing just this. In order to make it succeed, it needs your support. Send a check today. Earmark it for the school of your preference, or if you wish, just make it payable to "The American Medical Education Foundation," 535 North Dearborn Street, Chicago, Illinois. —T. T. Blalock, M.D.

Steve Paschal Kenyon, M. D.

The passing of Dr. Steve Paschal Kenyon on February 28, 1952, leaves us with a feeling of heartbroken sorrow and a sense of great personal loss, this feeling being shared by all who knew him, and it is particularly true of all members of the Medical Association of Georgia who through their many years of association with him had learned to love him.

Born in Webster County, he was the son of the late Dr. Owen Thomas Kenyon and Myra Kimbrough Kenyon. With his family he moved to Terrell County in 1900. He attended the Public School in Dawson and was graduated from Dawson High School in 1908. He matriculated at Mercer University in Macon, and after four years was graduated with the A.B. degree in 1912. At Mercer he was a member of the Sigma Nu Fraternity.

After his graduation from Mercer he taught school at Gainesville High School, Gainesville, Georgia, at which place he served as principal, and coach of the high school athletic activities.

In the fall of 1914 he entered the Emory University School of Medicine, Atlanta, and in June, 1918, he was awarded the degree of Doctor of Medicine. He was also awarded an honorary certificate by that institution. While at Emory he was elected to membership in the Phi Rho Sigma and Asklepios Medical Fraternities, and in 1917 he served as Editor-in-Chief of the school's annual, "Aesculapian."

During the World War he was an active member of the Reserve Corps of the United States Army.

After his graduation from Emory he served an internship at Wesley Memorial Hospital in Atlanta and one at Charity Hospital in New Orleans. He later did graduate work at the Harvard Medical School, Boston.

For the past thirty years he had practiced medicine in Dawson, where he was regarded as one of its most valued citizens, having been a leader in every worthwhile endeavor in his community. He had served as Alderman for the City of Dawson, as Chairman of the Board of Education for Dawson's Public Schools, as Commander of the Davis-Daniel Post of the American Legion, as President of the Dawson Rotary Club, as Director of the Bank of Dawson, as Chairman of the Terrell County Department of Public Health, and as Deacon of the First Baptist Church. In addition to these activities he had participated in the affairs of the Masons, Knight Templars, and Shriners.

He chose to practice general medicine and in this was an ideal ambassador as he knew how to interpret the heart and soul and conscience of medicine to the ordinary man because he understood humanity with all of its joys, sorrows, tragedies, and triumphs. For this reason he became interested in forming the Acad-

STEVE PASCHAL KENYON, M.D.



emy of General Practice, and through his enthusiasm and ardent support it developed rapidly in Georgia; he was the first President of the Georgia Chapter.

He was always interested in organized medicine. Early in his medical career he was elected President of his County Society. Later he was elected President of The Third District Medical Society, and still later a member of the Council of the Medical Association of Georgia, serving as Chairman of the Council at times. Since 1939 he had served as a member of the Georgia State Board of Medical Examiners, acting as Chairman of that body in 1942-1943.

In 1946, he was elected President-Elect of the Medical Association of Georgia and served as its President in 1947-1948. In 1949, he was Chairman of the General Practice Session of the Southern Medical Association.

Steve was deeply religious, which fact was evidenced by his long period of service, that of over a quarter of a century, as Deacon of the Baptist Church.

His home life was ideal, always enjoying the companionship of his wife, two daughters, and his grandchildren, and contributing immeasurably toward their happiness and comfort. Even toward the end of his life he, with his family, would let no note of sadness mar their associations. He was a horticulturist of no mean ability, his camellias and roses taking many prizes at various flower shows.

He was the scientist to the end, as he would dispassionately discuss and analyze the gradual progress of his disease and its symptoms.

Through his varied services he contributed much toward the educational, medical, and spiritual advancement of his state.

Steve was a well rounded man, this being portrayed by his sense of values, sense of humor, and his sparkling personality. Because of these traits he was an ideal companion, whether traveling to conventions, hunting, fishing, or playing golf. He believed not only in hard work but in some recreation, and he felt that a combination of the two made for a fuller life.

We can truly say with Shakespeare, "His life was gentle and elements so mixed in him that nature might stand up and say to the world, 'This was a man'." To me, this was his outstanding characteristic; he was a man. One could always rely on Steve. When he told you something, that was that. His unfailing courage, kindness, and tact was a bulwark for our profession, and sustained us on many occasions. His convictions on the subjects of personal and professional ethics were well recognized by all who knew him. He was incapable of compromise with an ideal; once he had formulated a principle he stood by it through thick and thin. Such men are rare, and the loss of such a man is tragic to those he leaves behind.

He was our friend, and we shall not forget him. We shall miss him, and from him we have learned how "Better than bread is the friendship of a friend."

—J. C. Patterson, M.D.

Your New

CONSTITUTION *and* BY-LAWS

The need for bringing the Constitution and By-Laws of our Association up to date due to many changes that have taken place within organized medicine in modern society has been known to exist for many years. These thoughts and ideas were put to work by Past President Callaway, when he appointed a committee to study the situation and make recommendations accordingly. The work of this committee was turned over to an entirely new one the following year, which in turn reported out the present instrument, adopted unanimously at Augusta last April.

It was realized then that this would by no means be the final revision and that other changes would be required from time to time. Other states noted similar experiences. Consequently, our new Constitution and By-Laws hardly had been in operation before omissions, changes, and even errors became apparent. All amendments that seem important have been carefully considered by the present committee, which fortunately is made up of members of both original committees, and the report is presented in these pages.

It is not our intention to discuss each suggested change, but several are worthy of comment. The obvious and pressing need for a Speaker of the House of Delegates has been realized for years, the President having so many other duties to perform during an Annual Session. With the House of Delegates assuming all responsibilities for the complete management of the affairs of the Association with the exception of election of officers, a larger and more democratic representation from the membership was needed. The problem of the small County Society requires fair and equitable consideration, but modern transportation facilities makes it possible for any physician to reach an adjoining society meet-

ing in a short time. Actually, the requirement for three members as a minimum seems extremely liberal in comparison with other states.

The Committee problem remains with us—after a serious attempt to limit the number only to those with a definite function to perform, we find now that even this list will have to be increased. There is plenty of work to be done by all of our present committees and much of their activity depends on the aggressiveness of the chairman. Your careful study of the contemplated changes is recommended so that your delegates will be prepared to take the proper action in Atlanta in May. In the meantime you are invited to write in your viewpoints for consideration by other members. An informed and intelligent voter is the backbone of our democratic institutions.

REFRESHER COURSES

-- *MAG Makes an Experiment*

Along with the February *PR News Letter,* members of the Association received an announcement concerning a contemplated course in graduate studies that would be given at the time of the Annual Session, if a sufficient number was interested. A card was enclosed for members to state their preference of topics to be covered and the number of hours that could be devoted to the purpose.

Actually this was intended primarily as a "feeler" to determine if Georgia doctors were interested in an educational program—even to the extent of donating time and money to it. Experiences along these lines in the past have been none too successful. Imagine the pleasant surprise to have cards returned promptly and, while not in staggering numbers, sufficient enough to indicate decided interest among younger physicians, particularly in the basic sciences. Perhaps the requirements for Board Certification influenced them. It indicates a wholesome situation, none the less.

Now, the men in charge are arranging a brief course in as concise manner as possible to enable every participant to return home better informed and prepared to render more efficient medical care. At this writing, the necessity of a two-day course to cover all the chosen topics appears imminent, but the curriculum will permit attendance for a shorter period, if necessary.

More information will be available shortly, and the full schedule will be published in the April JOURNAL. If at all interested, members should reply promptly. It is possible that available facilities will be inadequate to accommodate all, and preference will be given to early applications.

ETERNAL VIGILANCE

The construction of hospitals in the smaller cities and towns of Georgia within the past two years has attracted almost fifty new physicians to locate in these cities and towns. This is an important step in supplying better medical care to the people of Georgia and a strong buttress against any tendency toward the socialization of medicine. If the people of this country are provided with reasonably adequate facilities for medical care under our present system, there is little likelihood that they will approve any radical change in the present method of providing medical care. However, we must be careful to insure the fact that constant thought is being given to the proper maintenance, improvement, and extension of medical care facilities for all persons within our State.

We have been greatly concerned by having brought to our attention a recent incident that occurred in a town in Georgia where a new county hospital is under construction. At the present time three physicians in practice in this community are associated together in a group. Prominent citizens in this community invited a young physician who will soon complete his second year of hospital training to visit this community with the thought of locating there before or about the time the new hospital is completed. The young physician made a favorable impression upon the citizens with whom he came in

contact. Within a few days following his visit, he communicated with the citizens who were sponsoring him, telling them that he would locate in the town within two or three months, as soon as his residency was completed.

Shortly after his decision had been made known in the town, word was sent to this young physician through a personal representative from the three physicians in the town who are associated together, inviting him to associate himself with them, specifying that they would pay him a salary of $6,500 a year and provide an office for him. The information was also sent to him that in the event he did not accept their offer to join with them, that it would be unwise for him to locate in this town and furthermore that they would take steps to see that he would not be admitted to staff privileges in the hospital now under construction. Quite naturally, unless a young physician is of an unsual aggressive temperament and welcomes conflict, he will not be likely to locate in this town.

Such action by any physician or group of physicians to throttle honest competition is indeed a serious matter. The medical profession has traditionally emphasized the importance of free choice of physicians by the patient. One of the strongest criticisms of any change in the present system of medical care is that under government regimentation there is lack of free choice of physician. Physicians everywhere must go to great pains to avoid the appearance of using questionable methods to prevent another physician locating in their area or endeavoring to use pressure to coerce new physicians into accepting their terms. Let us be sure that we do not put ourselves into the position of using methods that we criticise in others and that arouses resentment against the medical profession. Our system of free enterprise and free choice of physicians in the practice of medicine must be maintained. —R. C. Williams, M.D.

BACKACHE *in Women*

Of all the subjects which may be poorly taught in medical schools, that of backache in women seems to be the chief one, judging from its widespread occurrence and importance from a therapeutic standpoint. For a practical understanding, such pain in women may be differentiated into three general categories:

1. Gynecologic backache.
2. Pain due to dislocated intervertebral disc, allied bone injuries or neoplasms.
3. Chronic arthritis.

Furthermore, each of these may be quite easily identified from the history of the pain, its character, time of occurrence, radiation, relief, etc., to wit:

Backache due to pelvic pathology is usually bilateral, low lumbar in location, without much radiation. It may extend into the thighs, but never below the knees. It is worse at the end of day and is usually relieved by bed rest. It is increased at, or before, menstruation. It may date from pregnancy, attack of pelvic infection, abortion, dilatation and curettage, etc.

Backache associated with dislocated intervertebral disc is the trickiest and the one most often confused with the foregoing type, but a careful history according to plan brings the picture into focus. It is estimated that 10 per cent of women have some degree of affliction, and many of them have undergone fruitless pelvic operations for relief which was not forthcoming. Back pain associated with this condition is usually more on one side and radiates anteriorly, or down one leg, along the course of the nerves effected, the leg type being a very common site. In this case, there is pain along the posterior aspect of the thigh and leg to the heel. When the disc aflicted is higher, the pain may radiate to the ovarian region on the same side, without any leg pain. Rarely the condition is bilateral. The pain, in any case, is characterized by history of attacks of several weeks duration, often over the years; or it may date from an injury or trauma of parturition, operation, etc., and may be associated with malleolar parasthesia. The pain is notably worse at night, with the patient unable to lie in a position of comfort. It is increased on riding, coughing, sneezing and sometimes, on lifting. Confusion is added, in that it is worse before or during menstruation, probably due to vascular congestion of the region.

The back pain of chronic arthritis occurs more often in older women, and appears as pain and stiffness of the spine on rising. It has a tendency to wear off as the day proceeds. It may be affected by weather changes.

The physical findings on the examination should be more or less confirmatory of the impression received as to the diagnosis from the history. These include pelvic pathology in the nature of masses, tenderness and fixation of the pelvic organs. Neurologic examination, including x-rays of the spine, serve to differentiate herniation of the nucleus polyposis of the intervertebral disc, and evidence of calcified spurs indicating arthritis.

—Richard Torpin, M.D.

State Of Georgia

EXECUTIVE DEPARTMENT
ATLANTA

DOCTORS' DAY — 1952

A PROCLAMATION

BY THE GOVERNOR:

WHEREAS: March 30th has been designated as Doctors' Day, and

WHEREAS: Doctors' Day originated in the State of Georgia, and is dedicated to those physicians who have striven to improve the health of the people by diligent service in the fields of medicine, surgery and public health, and

WHEREAS: It commemorates the discovery of anesthetic ether by Doctor Crawford W. Long, who performed the first operation under ether on March 30, 1842, at Jefferson, which is considered the greatest single contribution ever made to surgery and suffering mankind, now

THEREFORE: I, Herman E. Talmadge, Governor of Georgia, do hereby proclaim March 30, 1952, as "DOCTORS' DAY" in Georgia.

In Witness Whereof, I have hereunto set my hand and caused the Seal of the Executive Department to be affixed, this the 20th day of February, 1952.

(s) HERMAN E. TALMADGE
Governor

(Official Seal)

BY THE GOVERNOR:

(s) WILLIAM H. KIMBROUGH
Secretary, Executive Department

HENRY E. STEADMAN, M.D., Hapeville

Reducing PAIN *in Hemorrhoidectomy*

The majority of patients with severe hemorrhoids come to surgery only after months of discomfort, bleeding and recurring pain. The patient lives in fear, not of the anesthetic or the operation, but of postoperative pain. His friends have contributed much to this fear by depicting a frightfully exaggerated account of almost unbearable postoperative pain. They tell him also about the starvation diet following the operation. For this bewildered patient, the removal of a rectal plug or packing and the pain of the first postoperative bowel movement become most dreaded experiences.

It is interesting to consider the daily behavior pattern of the patient with a long history of hemorrhoids. His relationships with other people are usually strained or unpleasant but after operation he becomes much more genial and normal. This is easily understood when the symptoms of hemorrhoids are relieved after surgery. The symptoms are listed by Pruitt[1] as follows: "The common local symptoms of hemorrhoids are: bleeding, protrusion, pain, feeling of fullness or discomfort, tenseness, sphincter-spasm, swelling, itching and discharge. Symptoms less common are nervousness, backache, anemia, sciatica, neuritis, headache, digestive disturbances, insomnia, menstrual disorder, urinary disorders." Referred pain is the cause of such symptoms as low backache, pain in lower abdomen, and irritable bladder.

In reviewing the literature, the writer found many other authors[2,3] interested in the postoperative comfort of their anorectal patients. Pruitt[4] states that pain which examination and operation may cause is feared and dreaded by the patient to such an extent that it is often the reason for postponing the consultation of the surgeon and the operation. Next to the eye, the anal canal and perianal region are the most sensitive parts of the body.

After eight years of study and application of technic, the procedure found by the author to give the best results in obliterating pain following hemorrhoidectomy is offered.

Read before the Medical Association of Georgia in annual session, Augusta, April 20, 1951.

Preoperative Preparation

The following eight steps are taken:

1. In patients with edema or infection, two to three hot saline sitz-baths daily are prescribed for two to three days before operation. Such treatment reduces the swelling and helps heal the local infection. Hasty operation on acute cases often results in sorrow for both surgeon and patient. Smith[5] writes: "If operation be resorted to in the acute stage, a stormy convalescence may be looked for, providing the operator is fortunate enough not to have a more serious result."
2. Psychotherapy is very helpful in these cases. The patient is assured that the operation will be painless, and that the immediate postoperative period will not be too uncomfortable.
3. A non-irritating enema of saline, or plain water, is given six to twelve hours preoperatively. Soap suds enemas are avoided because they are very irritating and cause hypersecretion of mucus which interferes with the operation.
4. Nembutal or Seconal, 1½ grs. is given orally, at bed time.
5. Repeat same 90 minutes before operation. This helps to relieve apprehension, to produce hypnosis, and serves as a prophylaxis for possible novacain reaction in those cases in which local or spinal anesthetic is used.
6. One-fourth grain of morphine, or one-third grain pantapon, is given one hour preoperatively for analgesia and hypnosis.
7. Scopolomine 1/150 gr. is given with the preoperative narcotic hypodermic to produce amnesia.
8. Acute thrombosed external hemorrhoids are treated as emergencies by incision and evacuation of clot under local anesthesia.

Anesthetic

Local infiltration with one per cent procaine, or

nupercain in one one-thousandth solution, is reserved for those cases in which spinal or intravenous anesthetic is contraindicated. This is often combined with blocking of inferior hemorrhoidal nerves.

The choice of anesthetic for hemorrhoidectomy is a saddle block, or low spinal, using 30 to 50 mg. of procaine, or 3 to 5 mg. of pontocaine, or less for most cases of internal or combined hemorrhoids. Sodium Pentothal may be used with success and it was found to afford satisfactory relaxation. Recently, curare has been added to give relaxation similar to that of a spinal or saddle block anesthetic.

Local infiltration with one per cent procaine is used for excision of most external hemorrhoids and skin tags in the absence of internal hemorrhoids or other pathology.

The use of anesthetics in oil should be practiced by those expert in its administration. The main advantage is to produce prolonged postoperative analgesia. It is believed that the method as described by Pruitt[4] to produce postoperative analgesia, by using twenty per cent ethyl alcohol, is much safer and easier to use. The landmarks for injection are more easily located, the complications of injection are less frequent, and the analgesia is more satisfactory. *A total of two centimeters of twenty per cent aqueous solution of ethyl alcohol is injected into the external sphincter, four minims in eight equidistant points around the circumferance of the anus, with one-half inch twenty-six gauge needle on insulin syringe. Not over 2 cm. is used since it produces temporary partial incontinence. It is not used in cases with markedly relaxed sphincter muscles for this reason. Prolonged partial anesthesia produced by this method may last from a few days to two or three weeks.

Most surgeons prefer the jackknife position, with buttocks strapped apart with adhesive strips. The lithotomy position is used for posterior fissures or fistulea.

Operation

The well known surgical principles used to reduce postoperative pain and complications are given special attention.

1. A posterior proctotomy is done in most of the cases.

The writer agrees with Whitney[2] that this procedure (sphincterotomy) "prevents onset of any postoperative spasms, prevents edema from forming in the strips of anal skin left between the excised hemorrhoids, it opens into the anus so that pressure dressings can be applied and maintained, eliminating the necessity for intra-anal drains, packs, tubes, and so forth, and it definitely prevents stricture formation."

2. Gentle dilation, but not divulsion of sphincter, is done in a few cases where anesthesia has not provided enough relaxation for exposure. Merar[3] shows that "paralysis caused by divulsion of sphincter only lasts 30 minutes unless regrettable damage is done." While recovering its power of contraction, it will contract spasmodically, causing sudden violent pain

3. Every effort should be made to avoid trauma, and gentle handling of the tissues is of utmost importance.

4. Every effort is made to use as few sutures, as possible. Catgut is the suture material of choice.

5. Every effort is made to prevent contamination.

6. Insofar as possible, no sutures are placed in the cutaneous structures. Dissection is carried above the mucocutaneous (pectinate) line for transfixing the pedicle. A simple whip stitch is often used after ligation of the pedicle to control bleeding points. In many patients, the bleeding vessels are ligated separately and edema, strangulation of tissue and infection are often avoided in this manner. Buie[9] and Pruitt[10] both use catgut sutures.

The use of oxycel, a hemostatic absorbable oxidized cellulose gauze, eliminates the necessity of using sutures for venous oozing. Frantz and Lattes[6] report success in controlling rectal hemorrhage with oxycel. Pruitt[10] uses oxycel routinely with excellent results, and the writer also finds it advantageous to use this hemostatic agent. Campbell[8] writes: "Enough sutures should be used along the mucocutaneous line to assure thorough hemostasis, but below this line are not only rarely necessary but usually contraindicated." Care is taken to excise all blind sinuses leading from the anal crypts, hypertrophied papillae, fissure-in-ano, infected crypts and skin tags. Adhesive strips are removed after hemorrhoidectomy and all excessive skin tags and mucous folds are smoothed up. The sinuses and crypts are detected with the crypt hook. An eight inch flexible probe bent on the end is a satisfactory instrument.

7. An open operation is used that permits drainage and avoids tension on the anal skin.

8. In patients with three or more hemorrhoid masses, parallel strips of skin and mucous membrane running up from the anus into the rectum are left. This reduces time of granulation and epithelization, and prevents strictures.

A comparative study of the various types of operations for the eradication of hemorrhoids and associated condition of anus and rectum is beyond the scope of this paper. Since the excision and suture operation of Pruitt[10] is used by the author, it is only fitting that a brief description of it be given here. "The most prominent portion of the pile is grasped in Pennington's forceps and pulled down. The hemorrhoid clamp is applied in the long axis of the bowel. The upper pole is ligated with number one plain, one end of which is used for continuous over and over suture around the forceps through the base of the pile. Over and over suture is pulled over the end of the forceps and the pile is trimmed away.

An incision through the excessive cutaneous structures and external hemorrhoidal mass is made around the margin of the pile on the mucous membrane. The loops are replaced over the forceps and gently tightened. After removal of forceps, loops are drawn tight and the two ends of the suture are tied. Excessive perianal skin folds are trimmed away, leaving a V-shaped point extending out on the perianal skin to facilitate drainage."

Some small hemorrhoids may be removed by

*This is a modification of W. E. Person's technic.

ligating the upper pole with a transfixing suture of catgut before excision of the hemorrhoid mass that is held with a Pennington pile forceps. A "manicure" is done and the bleeding points are ligated with catgut. With the use of oxycel to help control bleeding, this method is very effective in reducing postoperative pain.

A pressure dressing with nupercainal ointment is carefully applied, using a "T" binder and adhesive strips to hold buttocks together. It is advisable to use tincture of Benzoin on the parts to receive this adhesive and not to apply it too tightly in order to prevent adhesive burns resulting from allergic reaction or mechanical or chemical trauma.

Postoperative Treatment

Patients are given an ordinary light diet which is free of seeds and roughage. There is no attempt to prevent bowel movements. And this usually occurs on the second or third postoperative day. One ounce of mineral oil is given on the second and third nights. Oil retention enemas are not necessary as a general rule. Demerol has the adventage of not producing nausea or causing constipation. Morphine, pantapon or demerol may be given as needed but is rarely necessary. Codeine and analgesic compounds taken by mouth usually control the burning and discomfort. Analgesia due to alcohol keeps the patient relatively free of pain (caused by muscle contraction) for several days. Intravenous procaine has found a place in controlling postoperative pain in other type cases and may be very helpful in controlling pain followed anorectal surgery.

Hot saline sitz-baths are begun on the evening of the first postoperative day and are taken two or three times daily. This treatment is very beneficial since it promotes healing, combats infection, reduces edema and is very soothing to the patient.

The patient is allowed out of bed the next day after operation to begin his hot sitz-bath. Pain is usually conspicuously absent, especially after the first hot soak. Some patients get out of bed the evening of the day of operation. Early ambulation is not as necessary here because complications which early ambulation is intended to prevent are uncommon except in the most elderly patient.

Complications

1. The patient should be catheterized after 12 to 18 hours if necessary. This is done if the patient is in pain or has a markedly distended bladder. Psychotherapy is tried and only when it fails is the patient catheterized. The possibility of cystitis is remembered and an antiseptic is usually introduced into the bladder as a prophylaxis. Prostigimine or stigminene is given every four hours until the patient voids. Fluids are encouraged. Urinary retention has not occurred very often in this series because trauma is avoided during operation, no rectal plug or packing is used, and postoperative morphine is seldom required.

2. Excess tabs of skin are excised at end of operation. In spite of the above precautions, a few tabs may be missed. Pruitt states[12]: "Postoperative tabs occur in from five to fifteen per cent of cases." A few tabs have to be removed in the office treatment room by simple excising after using one per cent procaine infiltration local anesthetic.

3. Hemorrhage is guarded against by careful ligation of the superior pole of the hemorrhoid, individual ligation of the active bleeders, and simple whip closure. Oxycel is used to control oozing of blood in the operative field, thus reducing the amount of suture and making the use of a gauze rectal plug unnecessary. Fitzgerald[13] and Webster give Vitamin K routinely to overcome any decrease of thrombin production caused by the administration of barbituates, but its use is suggested only in patients with abnormally long clotting time. A pressure bandage of gauze is held in place with a "T" binder and adhesive strips across the buttocks. Hemostasis is more effective when sphincterectomy is done. Pruitt[14] describes a prophylactic hemostatic primary anorectal dressing in which prophylaxis is provided by sulfathiozole or sulfanilimide and hemostasis by oxycel. Secondary hemorrhage due to infection, ulceration, or sloughing around the hemorrhoidal stump were not found in this series.

4. Strictures of the anal canal did not occur in this series of cases. It is believed that the posterior proctotomy as previously described, is an important factor in prevention of strictures. All associated operable pathologic lesions are removed. Three parallel strips of skin and mucous membrane running up from the anus into the rectum were left in most of the cases. This allows the covering tissues to grow from the sides to meet each other to reduce time of healing and prevent stricture due to contracting scar tissue. A gentle rectal dilation is done on the fifth day to detect possible adhesions or bridging. This is repeated on the seventh day and also at the first office visit a week or ten days later. Suture approximation of tissues is held to a minimum. This also prevents sloughing of tissue which causes narrowing of the lumen by scar tissue contraction. Infection, a common cause of constriction, is guarded against constantly.

5. Infection of the wound often results if the operation is performed when hemorrhoids and surrounding tissue are acutely inflammed. Hot saline sitz-baths help clear up the acute infection and makes surgery safer. Infected crypts are excised.

Patients with cervicitis or vaginitis of infectious origin are treated before hemorrhoidectomy, else a persistant proctitis develops. Local application of sulfathiozole or sulfonilamide and hot salt sitz-baths are used postoperatively to prevent infection. The treatment is intensified if acute infection develops. Penicillin and streptomycin are specific in certain types of infection but are seldom necessary.

6. Menstruation complicates the postoperative course by causing discomfort and adding insult to injury. The psychologic effect is often bad and difficult to overcome. Certainly there is greater possibility of the transmission of infection at this time. Hot sitz-baths are not practical during the greater part of the menstrual period.

7. Adhesive blisters on buttocks or allergic reac-

tions are not actually complications of the operation but of postoperative care. They complicate the postoperative care by necessitating more and stronger analgesics. Sitz-baths are more difficult and painful. The weeping lesions present seem to do better with use of dry antiseptic powders. A careful allergic history is taken and mild nontoxic antiseptics are used. Soap and water is about the best antiseptic on the perineum.

Summary

The preoperative preparation of the anorectal patient is of utmost importance if he is to enjoy a relatively painless and immediate postoperative existance. The following points are mentioned:

1. Hot saline sitz-baths, two to three days preoperatively.
2. Psychotherapy.
3. A barbiturate the night before surgery.
4. The same barbiturate before time of operation serves to allay apprehension, to produce hypnosis, and to prevent certain rare reactions produced by drugs such as novocain when used as saddle block, nerve block or local infiltration anesthetic.
5. A narcotic given one hour preoperatively.
6. Scopolamine.
7. Non-irritating enema of saline or, preferably, plain water is given six to twelve hours preoperatively.
8. Acute thrombosed external hemorrhoids are treated by incision, when first seen.

Saddle block, local, and general anesthetics are discussed. Saddle block anesthesia is the most satisfactory in the hands of the anesthesiologist well trained in its administration.

The Pruitt method of hemorrhoidectomy is discussed and the alcohol injection is described in detail.

The well known surgical methods used to reduce postoperative pains are discussed with special emphasis on those relative to anorectal surgery. These include:

1. Posterior proctotomy.
2. Gentle dilation of sphincter.
3. Avoidance of trauma (chemical, mechanical or thermal) to tissue.
4. A minimum of foreign bodies, such as sutures.
5. No special effort is made to kill the germs normally present but a defense is set up to avoid introduction of any foreign invader.
6. A special effort is made to tie sutures above the area of sensation.
7. Blind sinuses and skin tags are excised.
8. The wound is left open to drain.
9. Strips of mucous membrane and skin are left so that the gaps may grow in to cover the raw areas as soon as possible.

The postoperative management is outlined as follows:

1. Infrequently a narcotic is administered.
2. Diet free of seed or roughage, otherwise selective, is given.
3. Sitz-baths are resumed on the first postoperative day.
4. Mineral oil in small doses is begun early.
5. Early ambulation is practiced.

Complications, which are rare in this series, are discussed.

Conclusion

A comfortable preoperative, operative and postoperative treatment for the anorectal patient is possible and should be of concern to every proctologist or general surgeon practicing in this field.

BIBLIOGRAPHY

1. Pruitt, M. C.: Symptoms and Signs in Hemorrhoids, St. Louis, C. V. Mosby Company, 1938, chap. 9, p. 74.
2. Whitney, Edward T., and Gaspar, Angelo: Progress in the Management of Hemorrhoids, Am. J. Surg. 1943, vol. 62, pp. 196-308.
3. Merar, Thomas J.: The Prevention of Pain Following Hemorrhoidectomy, Am. J. Surg., 1939, vol. 43, pp. 45-50.
4. Pruitt, M. C.: Transactions, American Proctological Society, 1944.
5. Smith, F. C.: Am. J. Surg. 6:352, 1929.
6. Frantz, V. K., and Lattes, R.: J.A.M.A. 120:798, 1945.
7. Pruitt, M. C.: Personal Communication.
8. Campbell, F. B.: J. Kansas Med. Soc. 28:164, 1928.
9. Buie, Louis A.: Protoscopic Examination and Treatment of Hemorrhoids and Anal Pruritus, Philadelphia, W. B. Saunders Company, 1931.
10. Pruitt, M. C.: Hemorrhoids, St. Louis, C. V. Mosby Company, 1938, chap. 10, pp. 127, 131-136, and 158.
11. Christopher, F.: Minor Surgery, Philadelphia, W. B. Saunders Company, 1941, chap. 18, p. 493.
12. Pruitt, M. C.: Personal Communication.
13. Fitzgerald, J. E., and Webster, Augusta: Obstetric Significance of Barbituates and Vitamin K., J.A.M.A. 119: 1082-85, 1942.
14. Pruitt, M. C.: Am. J. Surg. 75:292, 1948.

DISCUSSION OF PAPERS, written by Dr. L. J. Rabhan and Dr. Henry Steadman.

DR. M. C. PRUITT (Atlanta):

It is true that in the minds of many patients, rectal diseases have acquired a reputation for more than ordinary pain and there is much truth in this belief, since next to the eye, this is the most sensitive area in the body.

There is much that can be done to decrease or prevent postoperative pain in anorectal surgery. This should begin by trying to establish confidence and allay fear and apprehension, while taking the history and in the use of suggestions. To achieve an almost painless examination, it is often necessary to explain what is to be done in order to get cooperation and good muscular relaxation of the patient during examination and also for postoperative care.

Trauma is a common cause of postoperative pain, and it is important to avoid trauma caused by rough instrumentation, clamping of tissue that is not to be cut away, placing too many and too large sutures, injury to blood vessels from needle punctures or injection of an irritating solution which may cause hematoma, injury and swelling of tissue.

Trauma caused by divulsion of sphincter before hemorrhoidectomy tears or stretches almost every cutaneous, muscular, vascular and nerve fiber in the anorectal region and probably causes as much or more postoperative pain than almost any other one procedure. A posterior proctotomy is much to be desired because it prevents the swelling of tissue, gives complete relaxation of the sphincter, decreases sphincterspasm and in every way adds to the comfort of the patient.

In regard to Dr. Rabhan's paper* I have noted that bleeding from rectum is of such significance as to demand a careful history, as to time, amount, color, fresh, clots, mixed with mucus, pus or both, streaked or mixed with stool. Bright red blood at stool is most often due to fissure or to hemorrhoids. Blood clots, dark or black in color usually means that the lesion is higher up in the intestinal tract. Blood mixed with pus and mucus associated with frequent stools is suggestive of ulcerative colitis or malignancy.

Bleeding, from whatever cause, demands a proctoscopic examination, and if the cause is not determined, x-ray study of gastrointestinal tract should be made.

*Published in November, 1951 issue of *The Journal.*

SHOCK THERAPHY *in Psychiatry:*

A Review of the Literature and Results of Treatment

HARRY R. LIPTON, M.D., Atlanta

Mechanism of Action: The theories that have been put forward concerning the mechanism of action of shock therapy are as varied and clashing as the suggested etiologies of mental ailments. In reviewing fifty of these theories, Gordon[1] points out that many great drugs and curative methods began (and in some cases remain) as empiricals, and the usefulness of shock therapy is unmistakable, despite the obscurity of the mode of action.

A first group of theories are classified as somatogenic. These include: a physiologic action of a yet unknown type; weakening of association tracts; a beneficial vegetative effect; an effect on unknown "hormone" stimulating elements; the production of "acroagonine," a humoral substance formed in the interest of self-defense; an influence on the autonomic nervous system, which may be disordered in schizophrenia; an effect on brain metabolism; changes in nerve cell membranes; diencephalic "message" with resultant vegetative changes; an enhancement of the brain's capacity for oxygen utilization; stimulation of vago-insulin and adrenal systems; activity of more primitive diencephalic centers released; increased activity of autonomic nervous system.

The psychogenic theories include the following: stimulation of self-preservation drives; will to get well is fostered; helps emotional catharsis; unloads energy inherent to the death and destructive drives; mobilizes vital instincts; serves as atonement; initiates a regression and undoing of the personality with subsequent more satisfactory reassemblage.

Gellhorn[2] presents evidence for the theory that procedures used in shock therapy act primarily through central autonomic discharges and through their effects on the cerebral cortex. Functional mental diseases involve autonomic disturbances at the diencephalic level. In shock therapy there is a prolonged excitation of sympathetic centers and with increasing clinical improvement one observes an increased sympathetic responsiveness. Shock therapy invariably involves an excitation of the sympathetic-adrenal system as indicated by hyperglycemia, rise in blood pressure, sweat secretion, and lymphopenia. Hypothalamic and medullary autonomic centers are in a state of heightened excitability.

Hoagland[4] presents evidence that the adrenal cortex is stimulated by ACTH released endogenously during electro-shock therapy and that prognosis of improvement with electric shock therapy is correlated with the responsitivity of the adrenal cortex to pre-shock test injections of ACTH.

Since electric shock produces transient evidences of impairment of mental efficiency, Huston and Strother[23] sought a means of determining whether such impairment exists even though ordinary clinical examinations fail to reveal it. Tests were administered to a group of 75 patients suffering from psychoses not considered deteriorating in character. The tests used were the Babcock and Shipley-Hartford tests. The authors conclude that electric shock treatment does not produce any significant impairment of mental efficiency.

Shock Therapy in Manic-Depressive Psychosis:

Schiele, et al[5] investigated the value of electric shock in the treatment of manic patients. They conclude that electric shock therapy is the treatment of choice for manic-depressive psychosis. They note that manic patients nearly always require a larger number of treatments than depressive patients; as many as fifteen to thirty convulsions may be necessary. They believe that the frequency of treatment should be governed by symptomatic needs. Electric shock is well tolerated when given several times a day and may be more effective this way, a smaller total number of treatments being required. After the acute manic phase has subsided the usual rate of three treatments a week is generally satisfactory. It is usually wise to terminate treatment upon the appearance of confusion or earlier. Since manic patients have a tendency to relapse they should be observed carefully after treatment has been terminated. With signs of relapse a few additional treatments are given.

The Use of Electric Shock Therapy in Treatment of the Psychoneuroses:

MacKinnon[9] writes of this experiences in treating 300 patients of all diagnostic types with electric shock therapy over a four-year period. The results with psychoneuroses indicate that treatment of these patients with electric shock therapy is well worth while. Of a total of sixty-five treated, forty-two were classified as recovered or greatly improved and only nine were unimproved. While it could be expected that those patients with reactive depression would respond most favorably, many patients with anxiety states also responded well. The author is of the opin-

ion that electric shock therapy in conjunction with other forms of hospital treatment results in a higher recovery rate and shorter hospital stays in cases of psychoneurotics.

The Use of Electric Shock Therapy in General Paresis:

Solomon, et al[10] report on thirteen paretic patients treated successfully with electric shock therapy as an adjunct to the routine malaria and penicillin treatment. Shock treatment was withheld until the inflammatory aspects of the disease had been at least partially checked by penicillin. In no instance did serious complications occur, either during treatment or as a sequel. The authors are of the opinion that clinical symptoms are an inaccurate guide as to the extent of cerebral pathology; that in early stages of neurosyphilis, neurotic and psychotic reactions are indistinguishable from those observed in non-syphilitic patients. Their experience demonstrates that many of the psychotic symptoms of general paresis are not directly attributable to histopathological changes. The personality stability is altered by injury to the brain, the nature and extent of psychological deviation being determined by the life experience.

The Use of Electric Shock Therapy in Senile Psychoses:

Gallinek[11] cites cases illustrating three groups of patients presenting psychotic conditions during the senium which respond successfully to electric shock therapy.

In all three groups the results of electric shock therapy are surprisingly good. Patients with marked intellectual deterioration and those with delirious and confused states are excluded from the treatment. Usually a course of ten treatments or less was sufficient. The author concludes that paranoid and affective disorders occurring during the senium are not explainable solely on the basis of irreversible anatomic changes of senile degenerative and arteriosclerotic nature. These syndromes appear to be complex reaction types, determined by a constellation of factors, psychologic and socio-economic, as well as anatomic and physiologic.

The Use of Electric Shock Therpy in the Aged:

Wilbur and Fortes[12] report their experiences with a group of thirty patients, all past seventy. They conclude that convulsive shock therapy is well tolerated by the aged. Convulsive shock therapy in the aged can be made more safe if curare modification of the convulsion is utilized. The organic defects and diseases of old age are not necessarily contraindications for electroshock therapy.

The Use of Electric Shock Therapy in Patients With Associated Pulmonary Tuberculosis:

Close[13] believes that electroshock should be used in treating acute psychiatric illnesses with associated pulmonary tuberculosis, if delaying of shock therapy would reduce the possibility of alleviating symptoms which interfere with treatment of the tuberculosis. This refers principally to gaining the cooperation of the patient and obtaining proper nourishment, bed rest, or collapse therapy, if indicated. He reports eight cases in which electroshock therapy was used on patients with pulmonary tuberculosis with x-rays taken immediately prior to the institution of shock therapy and at repeated intervals following treatment. All eight patients showed improvement in their tuberculosis.

The Use of Electric Shock Therapy in Patients With Cardiovascular Diseases:

Shields, et al[14] report on thirty-nine cases of depression with cardiovascular disease treated by electroshock. Thirty-five cases were successfully treated. They conclude that this form of treatment may be administered with reasonable reassurance as regards the risk to the patient, except in the case of coronary artery disease and even this is not an absolute contraindication. They feel that, in many cases, long-standing depression or agitation, or the suicidal hazards, might well have a more deleterious effect than a short period of electroconvulsive treatments.

Shock Therapy in Pregnancy:

Cant[15] reports three cases of pregnant patients treated with various forms of shock therapy. Two patients went through pregnancy uneventfully while receiving electroshock therapy. One patient miscarried at about four months, while receiving her third course of combined shock and insulin therapy. The author concludes that pregnancy should not be considered an indication to deprive a psychotic woman of needed shock therapy.

Block[16] presents a case to add to the testimony of the value of electric convulsive therapy during pregnancy. This woman had a perfectly normal delivery after a total of thirty electric convulsive treatments. Neither was the baby injured nor the woman harmed in any way. Since treatment, the patient has been emotionally, mentally, and physically well.

The author administered six electric shock treatments to a thirty-six year old woman in her sixth month of pregnancy. She was mute, withdrawn, and retarded, and exhibited waxy flexibility of her extremities. Her condition was diagnosed as schizophrenia. It responded favorably to shock therapy. She delivered a normal healthy infant at term. She suffered a recurrence of her psychosis on the second day after delivery. She received two electric shock treatments and left the hospital on the sixth day, feeling well and exhibiting no unusual behavior.

Electric Shock Therapy in Patients With Skeletal Pathology:

Many patients have been denied electric shock therapy because of skeletal pathology. In the opinion of Gysin and Dumars[17] this contraindication of treatment has been overstressed. The judicious use of curare or seconal sodium can reduce this hazard to a minimum. Curare was used when preshock skeletal changes were not severe and seconal sodium was used particularly when patients were apprehensive and fearful. In thirteen cases showing skeletal

pathology before treatment, twelve following treatment showed either no change, or evidence of further healing. In one case there was no change in the old pathology; x-rays, however, showed evidence of a new compression fracture. The authors conclude that electric shock therapy can be given safely with the use of seconal sodium or curare to individuals who have skeletal pathology and whose mental condition can be benefited materially by the treatment. In the authors' experience, hypertrophic or traumatic arthritis and compression fractures of the thoracic and lumbar vertebrae are not contraindications to electric shock therapy.

Brief Shock Therapy:

Linn and Rosen[21] conclude that electric shock therapy on an out-patient basis offers some important psychotherapeutic advantages. It permits the patient to stay on his job at his normal social routine and in contact with his family. It spares him the psychologic trauma of confinement in a mental hospital. It offers opportunity for influencing his environment and changing the environmental attitudes. It opens possibilities for intensive individual psychotherapy on a scale not usually realized within a hospital.

They repeatedly had the experience of administering electric shock therapy to patients during psychotherapy which had come to a standstill because of the severity of the depression. In those cases, alleviation of the depression with electric shock therapy made subsequent psychotherapy considerably more fruitful.

Ambulatory Electric Shock Therapy:

Hauser and Peters[24] report the administration of electric shock therapy to three hundred selected ambulatory patients, first in a hospital set-up, later both in a hospital and in a private clinic. Preliminary intravenous sodium amytal prior to production of convulsions made possible the treatment of many patients who would otherwise have required hospitalization. The relaxing sleep after convulsion obtained with this drug tended to create a favorably attitude toward treatment. While it did not inhibit seizures, this drug alleviated apprehension and fear of treatment and improved the doctor-patient relationship. The general therapeutic results were similar to those obtained by other workers.

Chodoff et al[25] report on ambulatory shock treatment. They conclude ambulatory shock treatment has the advantages of avoiding hospitalization, saving time, money, and hospital beds, sparing the patient the stigma which still appears in the popular mind to mental hospitalization, and keeping the patient in his normal environment during treatment. They describe results in a series of three hundred and twenty-nine patients. They report good results in the treatment of patients suffering primarily from depressive syndromes, good results in the treatment of conversion hysteria, and fair results in the treatment of other psychoneuroses.

Intensive Electric Shock Therapy:

Valentine[26] reports on intensive electric shock therapy. Electric shock therapy used on an intensive schedule once a day or more frequently is qualitatively different in therapeutic value and side effects from the orthodox course of more widely spaced treatment. It is the preferable technique in some conditions. It may produce remissions in some patients who fail with orthodox courses of treatment. The effect of intensive treatment in twenty-one cases is described.

Treatment may be initiated once a day or oftener, according to the severity of presenting symptoms and continued until the gross features of the psychosis are broken up. The rate of treatment is then reduced by half and continued until a fair degree of improvement is obtained. It is preferable to stop just short of producing severe amnesic-confusional symptoms. Treatment is then continued with spaced doses and maintenance doses as required. The physical complications of electric shock therapy do not appear to be increased by its employment intensively.

Prophylactic Electric Shock Therapy:

The term "prophylactic electric shock" is applied to electric shock therapy given after recovery from a mental illness at approximately monthly intervals for the purpose of preventing recurrences of mental illness. Geoghegan[28] believes that, since induced convulsions often cause termination of a mental illness, they may also break up and dissipate accumulating tensions before they become visible as a definite mental illness. To test this theory a group of patients who had had two or more attacks of mental illness during thhe preceding five years, and who had recovered each time under electric shock therapy, were given a single treatment once a month for the ensuing three years. All the patients accepting the prophylactic program have been entirely free from attacks since beginning the prophylactic treatment three years ago. Of another group of patients who had also had two or more attacks of mental illness during the previous five year period, and who refused to accept prophylactic treatments, all had one or more attacks of mental illness during the same three years that those in the other group were free from attacks.

The Use of Drugs in Electric Shock Therapy:

Gysin and Witham[29] report on the use of sodium seconal intravenously prior to shock therapy in doses depending on the body weight and habitus. Pretreatment apprehension is eliminated and most patients come to treatment friendly and smiling. Side effects of treatment were minimal.

Tarnower and Gladstone[30] use a two and one half per cent solution of sodium pentothal in distilled water. In general, the convulsive threshold is increased by pentothal sodium but apnea and cyanosis are decreased. Return to full consciousness takes place in fifteen to forty minutes after treatment. The extra time necessary to administer pentothal sodium and the longer recovery time following shock may be considered disadvantageous but in compensation there are the advantages of allaying apprehension, elimination of post-convulsive excitement, and the prevention of musculo-skeletal injury.

Results of Electric Shock Treatment:

According to Kalinowsky and Hoch[31] the results in the various types of depression are so similar that it is safe to assume a close relation or even the same underlying causes in manic-depressive depression, involutional depression, senile depression, and even psychoneurotic depression. They all react to approximately four convulsions. It is customary to give a few additional treatments in order to stabilize the results. The total number of treatments given by different workers varies between five and ten. Treatments are given from two to three times a week. Giving treatments twice a week has the advantage of avoiding confusional states which are not necessary for results in depression. The rate of remission in manic-depressive depression in most reports varies between eighty to one hundred per cent. The duration of the illness has no bearing on the outcome. The manic phase of manic-depressive psychosis differs from the depressive phase in its response to convulsive therapy. In this phase treatment should be given daily, or even two or three treatments given in one day.

In schizophrenic patients depressive symptoms, as well as other acute symptoms, also frequently yield rather quickly to a few convulsive treatments. Often other psychotic symptoms, previously overshadowed, become more recognizable. The removed symptoms frequently return in a few days. In the treatment of schizophrenia, as many as fifteen to forty convulsions are necessary. The remission rate is about 60% for cases of less than six months duration and 50% for cases up to eighteen months duration. In cases of longer than eighteen months duration the remission rate is only 10%, with an additional 37% showing lesser degrees of improvement. Premature discontinuation of therapy in schizophrenic patients commonly results in relapses. Patients who relapse after a good remission frequently respond well to a new course of treatment.

Review of Cases Treated by Author:

One hundred and twenty-eight patients were treated by electric shock over a period of five years, beginning in 1946. The Cerletti-Bini technic was used; an alternating current of fifty to sixty cycles, stimulation time 0.15 to .5 seconds; strength of stimulus 450 to 750 milliamperes, voltage 105 to 125; and bitemporo-frontal electrode position. One patient received five courses of treatment over a two-year period, totaling eighteen treatments. Another patient received three courses over a nine-month period, totaling fifteen treatments. Thirteen patients received two courses of treatment and one hundred and eleven patients one course only. The average number of treatments given per patient was seven. Ninety-two per cent of the reactions were of the grand mal type and eight per cent of the petit mal type. The group treated consisted of twenty-five men and one hundred and three women. Fifty-nine, or 46%, received treatment in hospitals. Sixty-nine, or 54%, received ambulatory office treatment. Patients received from two to seven and a half grains of sodium pentothal intravenously prior to shock therapy, an amount sufficient to put them in a light state of sleep. The patient could not reply to questions but could open his mouth voluntarily on request to bite on the rubber tubing used as a mouth gag. The patients were given from one to two ccs. of demerol after the treatment. With this technique there was rarely any fear of treatment or any unpleasant recollections. Most patients slept from one-half to one and a half hours after treatments and were ready to go home in from one and a half to two hours following treatment. There were no complications from treatment in the group treated.

Of a group of thirty-three patients suffering from manic-depressive psychosis, depressed phase, treatment of twenty resulted in remission; in four there was no improvement; and in the cases of nine the results of treatment could not be determined because of loss of contact with the patients. Three out of four manic-depressive psychosis, manic phase, patients were treated successfully. Twenty-two patients suffering from schizophrenia were treated. Remission of the psychosis was obtaiend in six; twelve showed no improvement and the status of four was not known because of loss of contact with the patient. Fifty-three patients with psychoneurosis, depressed type, were treated. Forty-five of this group responded favorably to treatment. Three showed no improvement and the status of five could not be determined. Only one out of three patients suffering from psychoneurosis anxiety state responded favorably to treatment. Four out of eight patients suffering from chronic alcoholism, with underlying psychoneurotic depression, responded favorably to shock therapy. There were no suicides among the group treated. Seven patients of the group treated were subsequently admitted to the State Hospital; six of these were schizophrenic patients.

REFERENCES

1. Gordon, Hirsch L.: Mil. Surgeon 103:387-401 (Nov.) 1948.
2. Gellhorn, E.: Proc. Roy. Soc. Med. 42:55-70, 1949.
3. Flescher, Joachim: Psychoanalyt. Rev. 37:277-280, (July) 1950.
4. Hoagland, H., Elmadjian, Callaway, and Pincus: Psychosom. Med. 12:73-77, (March) 1950.
5. Schiele, B. B., and Schneider, R. H.: Dis. Nerv. System, 10:291-297, (Oct.) 1949.
6. Huston, Paul, and Locher, L. M.: Arch. Neurol. & Psychiat. 60: 37-48, (July) 1948.
7. Oltman, Jane E., and Friedman, Samuel: Am. J. Psychiat. 107:57-58, (July) 1950.
8. Morrow, James K., and King, James P.: Am. J. Psychiat., 105:815-20, (May) 1949.
9. MacKinnon, A. L.: Canad. M. A. J. 58:478-83, (May) 1948.
10. Solomon, H. G.; Rose, A. S., and Arnot, R. E.: J. Nerv. & Ment. Dis. 107:337-381 (April) 1948.
11. Gallinek, Alfred: Nerv. & Ment. Dis., 108:293-303, (Oct.) 1948.
12. Wilbur, C. B., and Fortes, A.: Am. J. of Psychiat., 104:48-51, (July) 1947.
13. Close, Henry P.: Am. J. of Psychiat. 105:352-57, (Nov.) 1949.
14. Shields, McCue, and Tucker: South. M. J. vol. 43, no. 5, (May) 1950.
15. Cant, Emma M.: Psychiatric Quart. vol. 21, no. 1, 1947.
16. Block, Siegfried: Am. J. Psychiat. p. 579, (Feb.) 1948.
17. Gysin and Dumars: Dis. Nerv. System, 9:300-304, (Oct.) 1948.

18. Polatin, Phillip, and Linn, Louis: Am. J. of Psychiat. 105: 825-828, (May) 1949.
19. Yost, Orin R.: The Use of Electric Shock in the Treatment of Neuroses, Orangeburg, S. C.
20. Hamilton, Donald M.: Am. J. Psychiat. 103:665-668, (Mar.)1947.
21. Linn, Louis, and Rosen, Samuel R.: Psychiatric Quart. 24:506-514, 1950.
22. Savitsky, Nathan, and Karliner, William: Am. J. Psychiat. pp. 107-199 (Sept.) 1947.
23. Huston, P. E., and Strother, C. R.: Am. J. Psychiat. 104:707-712, (May) 1948.
24. Hauser, A., and Peters, I. D.: Dis. Nerv. System 9:55-59 (Feb.) 1948.
25. Legaut, Chodoff, and Freeman, Dis. Nerv. System, 11: 195-201, (July) 1950.
26. Valentino, Max: J. Nerv. & Ment. Dis. 609:95-112, (Feb.) 1949.
27. Mallison, W.P.: Brit. M. J. 2:641-645, (Oct.) 1948.
28. J. J. Geoghegan, Am. J. Psychiat. 105: 494-496, (Jan.) 1949.
29. Gysin, W. M., and Witham, R. G.: Dis. Nerv. System 10:315-317, (Oct.) 1949.
30. Tarnower, and Gladstone: New England J. Med. 242:653-655, (Apr.) 1950.
31. Kalinowsky, Lothar B., and Hoch, Paul H.: Shock Treatments and Other Somatic Procedures in Psychiatry, New York, Grune and Stratton, Inc., 1950.

490 Peachtree St., N. E., Atlanta.

DISCUSSION OF PAPERS, "The Problem of Psychic Versus Somatic Disease," by Drs. Tift and Hazlehurst,* "The Contribution of Psychiatry to the Role of the Medical Practitioner," by Rives Chalmers,* and "Shock Therapy: A Review of the Literature and Results of Treatment," by Harry R. Lipton.

DR. H. DAWSON ALLEN (Milledgeville):

While the soma and the psyche are reciprocal and complimentary, there are disturbances of the soma that are of very serious nature, with minimal disturbances in the tissues. Conversely, there are disturbances of the soma with minimal disturbances in the psyche other than the incapacitation of the patient.

The term "psychosomatic" has always been disliked by me, because it always seems to carry an implication that there has been a time, even recently, when the physician felt that the mind was more or less independent or detached. I am sure all of you remember the story of the beautiful young Greek boy who, gazing into a pool, fell in love with the beauty of his own reflection. His principal pastime was that of sitting by the pool and gazing at his own image. There was a young woman involved in the story, who came and sat beside him. She pleaded with him to look toward her, but her pleading was in vain, and with this she began pining and wasting away until there was nothing left of her but her voice. This young woman was known as Psyche, and as she faded away, leaving nothing but her voice, she became Echo. Since that time it seems to me there has been a great deal in our psychiatric concepts that has been influenced by Echo, and that most of these concepts have little more scientific foundation than we find in T. S. Eliot's psychiatry of the uninvited guest at the cocktail party, who made the profound observation that most of the troubles of people were due to their wanting to be well thought of.

DR. HERVEY CLECKLEY (Augusta):

The paper by Drs. Tift and Hazlehurst, gives me a chance to exercise one of the important functions of psychotherapy, not on you people but on myself: it gives me a chance for psychic catharsis.

It puts me in mind of a patient, who appeared to have almost all of the characteristics of involution of melancholia, and was so diagnosed. We gave electric shock treatment, and he improved under it, but when he came back two months or so later examinations of the eyes showed choked disc and almost every other sign of frontal lobe tumor, which indeed he had.

No matter how much we try, we will always make mistakes of that sort. I believe it is very important to avoid the over-selling of psychiatry in diagnosis. The fact that we can find in people's lives conflicts and severe emotional problems which might account for the symptom, was well brought out in this paper.

I think we also should remind ourselves that there probably is no one who would not show sources of conflict, and who would not show experiences, on which a hypothesis of psychodynamic etiology might be based.

This over-selling of psychiatry, I think, is important to emphasize. Psychiatry has made very great advances, as the paper on psychotherapy by Dr. Chalmers, and the paper on electric shock therapy, by Dr. Lipton, indicate. However, we should not glibly take the patient and put him in a bed of Procrustes and say, "Yes, he had some misunderstanding with his father a long time ago; he and his wife fuss, and therefore his pain must be psychogenic."

If we go too far that way we will get into the position of the fellow in the story told about two psychiatrists, very dynamically minded, who, walking down the street one fine spring morning, saw a former patient of one, who came by and said, "Good morning, Doctor." They walked along further and the psychiatrist who had been accosted said, "You know, I wonder what that s.o.b. really meant by that!"

Sometimes we can read a lot of things into the material that may not be there.

This paper well emphasizes the importance not of ignoring or minimizing emotional factors, which we all agree are very important, but to continue openminded and not make the diagnosis just because we don't find the physical basis—nor, on the other hand, continue to run examination after examination if it isn't indicated, but to consider the attitude of the patient toward his complaint—to consider what he seems like as a personality.

I think in that area we will find our best means of making a distinction, better than in repeating over and over and over again expensive measures of examination, whether psychiatric or surgical or general medicine.

The paper on psychotherapy and the contribution of psychiatry to medical practice is a very important one to me, particularly in the elasticity with which the concepts were expressed—the lack of dogma and the emphasis on what I think is a fundamental matter in psychotherapy, the relation between the physician and patient.

Of course, Dr. Chalmers didn't exactly say what that is. He didn't tell you exactly how you do go about curing each patient, nor has anyone else ever successfully told anything like that. I think what he had to say does stimulate us all, however, to think of our own experiences with other human beings, patients primarily, with friends and acquaintances and people to whom we have come for advice, and wonder just what it is that helps sometimes to do the patient good and enables us to get help from others whose counsel we seek.

I agree thoroughly with him, too, that it is not so much giving the patient final wisdom, telling him exactly how to solve his problems. Each person is too much different from another for anyone to be wise enough to work out the whole thing for him.

I mentioned the bed of Procrustes—the relationship that Dr. Chalmers is talking about. It seems to me to avoid that Procrustean dogmatic framework of reference in which we take our particular theories, even though there may be a lot of evidence for them, and try to fit each case into a Procrustean bed and interpret it, rather than to work primarily from what seem to be the facts in the case.

DR. CORBETT H. THIGPEN (Augusta):

First item of interest was the use of electric shock treatment in Parkinsonism, particularly in those patients frozen with rigidity. We have seen a number of patients who were frozen and unable to move or respond, who did respond beautifully to electroshock therapy. One man had been unable to work for ten years, and at the present time he is employed nine months after receiving electric shock therapy. He comes in occasionally for a kind of booster dose.

Of interest also is the use of electric shock in morphine addicts and the related narcotic addicts. It is not to say that a person, though he is treated, won't go back to morphine, but we have been very pleasantly surprised in many of these

*The paper by Drs. Tift and Hazlehurst was published in the August, 1951, *Journal;* that by Dr. Chalmers in the December, 1951, *Journal.*

patients, to note that even after two or three years they have not gone back to their addition.

Another interesting thing is that we are at a loss to understand or explain the fact that very, very few of these patients show the typical withdrawal symptoms by using electric shock treatment. Generally, when they ask for a shot of morphine or other narcotic, we give them an electric shock treatment. One patient received six in one day.

To you it might seem outrageous; but, as Dr. Lipton pointed out, the major electric shock treatment is very small, much smaller than he was willing to indicate.

Further, I would like to mention that electric shock treatment is broken down into a number of forms of treatment. There is the old electric shock treatment; there is a new brief stimulus treatment which is now kind of old; there is electronarcosis and the new Reider machine. There are some real uses for these various machines in psychiatry for a specific thing. That is not to say, however, that any of them is a panacea for psychiatric illnesses.

DR. HARRY R. LIPTON (closing): I have had no experience in treating morphine addicts or cases with Parkinsonism. I have had some experience with several epileptic patients, whom I have treated with electric shock therapy, and in whom I thought there was a large emotional component to the seizures.

In spite of having typical electro-encephalographic findings that go with grand mal, or that go with cerebral dysrhythmia, the majority of these patients have responded very well to electric shock, and have been free from seizures for periods as long as two years.

DR. RIVES CHALMERS (closing):

Drs. Tift and Hazlehurst have pointed out the fact that psychiatry cannot meet the needs of all patients or even all patients who seem to have emotional problems. I believe we want doctors to realize that even though we talk about treating the whole individual, we as psychiatrists are still dealing primarily within the field of emotions, and we are not as well qualified at times to make diagnoses in the field of internal medicine, in the field of surgery and other specialties, and we rely upon you men in other branches of medicine or in the field of general practice to help us out in making our diagnoses and in following our patients.

We contribute a very specialized area of information, and try to contribute some understanding to the patient, but we realize very clearly that all these types of experiences are going to come up to us, and one of us who takes upon himself the job of curing the whole patient, through treating him for his emotional disturbance, usually is going to be in the bulk that Dr. Hazlehurst and Dr. Tift have described.

We have to realize that the emotions are a definite part of us, but they are not all of us; and you many times are the people who have to let us know what is going on in the field of the physical body, even though we see the patient regularly. We are not making studies on the physical body.

Incidence of

EARLY MALIGNANCY

in Uteri Removed for Benign Conditions

OLIN S. COFER, M.D., and *ALBERT L. EVANS, M.D.*, Atlanta

Uterine cancer is the most frequent type of malignancy and the salvage in cervical cancer is pitifully low. The curability rate, notwithstanding improved methods in irradiation therapy and surgery, has been lowered but little. It would appear, therefore, that a partial solution of the problem would rest with the early correction of lesions which predispose to the development of malignancy as the mystery of its cause is still unsolved.

Uterine cancer is, in most instances, a disease of middle aged and elderly women and usually occurs in those who have borne children. It is conceded by most authorities that injuries of the birth canal of various types certainly play a part in the etiology of cancer.

We believe that after the child bearing period is over and the menopause is due, the function of the uterus is not necessary to the well being of the woman, if the ovaries are preserved. Many women experience menopausal changes at 40 and most of them before the age of 45 but, in our opinion, the endocrine ovarian function usually persists for many years beyond this age.

It is reasonable to assume, therefore, that if there exists some disease of the genital organs such as cervicitis, prolapse, fibroids, cystocele, rectocele, or severe functional disorders, beyond the menopausal age, it is preferable to remove the uterus instead of performing conservative plastic operations which may be ineffectual and often fail to give relief.

In the study of a series of vaginal hysterectomies performed for various benign conditions of the female genital tract, we were very much surprised to find a much higher percentage of early malignancies than statistical studies of the literature would seem to

Read before the Medical Association of Georgia in annual session, Augusta, April 19, 1951.

indicate.

No known or suspected malignancies are included in these series unless a negative cervical biopsy and diagnostic curettage had been performed within a period of one to three months prior to the performance of the hysterectomy.

We have made free use of the various methods for the early diagnosis of carcinoma of the cervix and corpus, where sufficient symptoms existed to justify the carrying out of these procedures. While we have made numerous studies of cervical and vaginal smears as originated by Papanicolaou, yet in the type of condition in which we have found early malignancy, either of the cervix or endometrium, this method has been of little value. Most authorities feel that the method of Papanicolaou and his workers is of most value in the screening of cases which should be further investigated and that a positive diagnosis should not be made from positive smears alone.

Falls[1] states that if these examinations are made by a pathologist, expert in the method, they are of considerable value but no treatment for malignancy should be instigated unless the positive smears are followed by positive biopsy of the cervix or endometrium. Galloway[2] estimates that 18,000 deaths occur yearly from cervical cancer alone and believes that the Papanicolaou smears cannot be relied upon unless supported by a positive biopsy. Pund[3] and his associates have done a considerable amount of work in the early diagnosis of carcinoma of the cervix, particularly carcinoma in situ and have followed many of them over a period of years with evidence of development from a non-invasive into an invasive stage. Donnelly and Bauld[4] report 28 cases of cervical stump carcinoma nearly all of which were a grade three or four with a mortality of practically 100 per cent within a period of 5 years. Novak[5] writes at least 17,152 deaths from cervical cancer occurred in 1947 and that reliable diagnoses were difficult by Papanicolaou smears and that biopsy is necessary. Danforth[6] found that cervical cancer develops in about 2 per cent of sub-total hysterectomies and advises complete hysterectomy either vaginal or abdominal whenever possible. Hunt[7] describes the dangers of the retained cervix and in addition to the fear of cancer, calls attention to the frequency of cervicitis, bleeding, leucorrhoea and so forth. Davis and Cheek[8] report 87 cases of bleeding from the retained cervix, 46 per cent of which were found to be malignant and in whom the prognosis was almost hopeless as they had, in the main, developed silently. They also report that within a period of 15 months biopsies from the cervices of women about to undergo gynecological procedures, failed to reveal malignancy in 9 cases in whom pathological examination of the excised specimens showed malignancy. There were no suggestive symptoms in any of these cases which would ordinarily require a biopsy.

Koch[9] writes that only 56 cases of cervical stump carcinomas were reported in Germany prior to 1928 but since that time more than 1,000 cases have appeared in the German literature. He states that the prognosis is very bad as only 16.6 per cent were free from recurrence after five years. Diddle and Bennett[10] report 56 cases of supra-cervical hysterectomies followed by carcinoma of the cervix within a period of 3 to 24 months after operation with very poor therapeutic results. Tyrone, Collins et al[11] analyzed 478 total hysterectomies, 29 sub-total hysterectomies and 100 vaginal hysterectomies and found malignancy in 8.2 per cent. The operations were performed for benign lesions and the malignancies were found in the examination of the removed specimens without a previous diagnosis of cancer. Siddall[12] found 5.1 per cent corporeal cancer in 5,745 hysterectomies done for fibroids. Corscaden, Fretig and Gunsberg[13] reported that of 958 patients irradiated for benign uterine bleeding and followed an average of 6.7 years, 15 developed uterine carcinomata which is three times that expected in the general population. TeLinde and Galvin[14] stress that differences of opinion between pathologists in the diagnosis of biopsy specimens and found malignancy in serial sections made after the removal of the specimens in 10 cases previously reported as benign.

We believe that the incidence of carcinoma in the retained cervical stump is much greater than the literature would seem to prove, as many of these cases are beyond all human aid before discovered and therefore are not reported. We also, believe that the incidence of carcinoma of the cervix as well as the endometrium in women who menstruate beyond the age of 45 is much greater than it is usually thought to be. Campbell[15] reports 2,798 vaginal hysterectomies done at the Presbyterian Hospital in Chicago and believes that in benign lesions of the uterus, the mortality rate for vaginal hysterectomies is lower than a menopausal dose of radium and is safest for bad risks, therefore must be safest for good risks.

No apology is made for the performance of vaginal hysterectomy in elderly and middle aged women who present sufficient indications for operation to alleviate menorrhagia, metrorrhagia, adenomyosis, fibroids, severe cervicitis, uterine prolapse, cystocele and rectocele as well as various other conditions which may be treated either by hysterectomy, irradiation or plastic operations. We feel that after the child bearing period is over and the menopause is due, that it is fallacious to preserve a uterus which naturally does not function further. Except for some mental reaction in unstable individuals, we have never found a hysterectomy to produce any of the usual symptoms which the lay population are so eager to predict. The mortality in our series is less than one-third of one per cent which is in accord with that reported by many investigators throughout the country. We feel that even one-third of one per cent is higher than it should be as two of our deaths occurred in patients who were bad risks for any kind of operation but elected to undergo it because of the discomfort caused by extensive prolapse. We believe along with many others experienced in vaginal hysterectomy that the mortality is no greater than in radiation therapy

and that the end results are immeasurably superior.

Our series consist of 746 vaginal hysterectomies performed for benign conditions of the female genital tract. We have consistently avoided performing vaginal hysterectomy for patients having a diagnosis of endometrial malignancy, but have performed it in a few instances of early cervical malignancy. Thirty of these uteri were proved by pathological examination of serial sections of the removed specimens to have either early carcinoma of the cervix or of the endometrium and one had a leio-myo-sarcoma. There were 4 cases of adenocarcinoma of the corpus, 26 cases of cervical carcinoma and the above mentioned sarcoma. Eighty-two per cent of our patients were above 40 years of age and 55 per cent over 45 years of age. Many of them were elderly women with prolapse of the uterus of varying degrees in whom vaginal hysterectomy is safe and facilitates restoration of the pelvic supports. In most of these women, the uterus was rather small, frequently the seat of cervicitis, fibroids or other pathology and could be better supported by the removal of the uterus and bunching of the broad ligaments by the different methods and with a much better result than the performance of the Manchester or other types of plastic operations.

Unless the ovaries and tubes are found to be diseased, which is unusual, neither were ordinarily removed at the time of the hysterectomy, though in most patients we have experienced no particular difficulty in removing the adnexae, if such is indicated. A careful follow up has been kept on all of these patients but two, which could not be traced, and in only one of them has there been any evidence whatever of a recurrence of the malignancy. Two have died of unrelated conditions, but neither had evidence of recurrence at the time of death. We believe that in all of these patients the malignancy was early and that they will remain permanently well.

The only patient in whom a recurrence occurred was in a woman of 60 who had no discharge or bleeding but a suspicious cervix. Biopsy taken a week before operation was negative but the removed uterus showed a squamous celled carcinoma of the uterus. She developed a rapid general carcinomatosis and died 2 years later.

It will be noted that no case of ovarian malignancy is included in this series since malignancy has not been found in any of the ovaries removed at the time of vaginal hysterectomy.

It is admitted that approximately one third of the vaginal hysterectomies included in this series had been largely treated in the past by x-ray or radium but we believe that the results in cases handled by this method are much poorer than if the uterus is removed.

In a series of 38 cases of patients having had vaginal hysterectomies, who had been irradiated previous to operation, pathological examination of the ovaries removed showed complete destruction of the ovaries which were replaced by fibrous tissue. Some of these patients had receivd as little as 1200 milligram hours and all of them were given radium to produce the menopause. Three patients had received two applications of radium and one patient had three applications, which of course, produced much more extensive changes.

We believe, therefore, that equivalent irradiation above 1800 milligram hours of radium salt is synonymous with surgical excision of the ovaries and uterus and that before this dosage is administered, the patient should be prepared to accept a rapid and complete menopause. This position is in line with that taken by many of the larger clinics throughout the country, some of which never use radiation therapy for production of the menopause but advise vaginal hysterectomy.

Many of our patients gave a history of profuse menstruation throughout their lives which had necessitated the administration of various tonics, blood transfusions and so forth during their active childbearing period in order that they remain in good health. It is in this type of patient that the menopause changes are likely to bring on a menorrhagia and it has been proved that the occurrence of malignancy and fibroids is much greater in women who menstruate beyond the usual menopausal age of 45.

It is hoped that no one will draw the conclusion that hysterectomy is advised in all women above the age of 40 and 45, or any other age, in order to avoid malignancy. However, we have attempted to show that cervical cancer is a real menace in diseased uteri and that after the menopause, if it becomes necessary to perform extensive plastic operations, most patients will be found to have sufficient uterine pathology to justify hysterectomy.

The arguments usually advanced against vaginal hysterectomy always include the danger of shortened vagina, dyspareunia, frigidity, prolapse, recurrence of the cystocele and rectocele but these are not supported by analysis of our cases. While all of these sequelae have been found in rare instances, yet no more frequently than after irradiation, plastic operations or abdominal section. Many of the postoperative symptoms are purely psychic in origin as some people feel that after an operation one should be born again.

Summary

1. Carcinoma of the cervix is difficult to diagnose in a curative stage and results of the treatment of diagnosed cases are poor, both in regard to curability and morbidity.

2. Simple vaginal hysterectomy with a postoperative diagnosis of early cancer has not been followed by recurrence in the cases reported and carries a low mortality.

3. Hysterectomy is not advised in young women without an accurate diagnosis of malignancy or other pathology necessitating it, but should be performed more often in late middle age or elderly women.

4. The mortality rate treatment of cancer of the cervix has been lowered but very little within the last decade notwithstanding improved methods of treatment.

5. Corporal cancer is much more readily diagnosed

and the results of treatment are much better than cervical cancer.

BIBLIOGRAPHY

1. Falls: J. Internat. Coll. Surgeons, 11:24-28 (Jan.-Feb.) 1948.
2. Galloway: Mississippi Valley M. J. 70:93-97 (May) 1948.
3. Pund et al: Am. J. Obst. & Gynec. 55:831-837 (May) 1948.
4. Donnelly and Bauld: Am. J. Obst. & Gynec. 56:494-501.
5. Novak, Emil: J. A. M. A. 135:199-206 (Sept. 27) 1947.
6. Danforth: A. J. Obst. & Gynec. 52:217-219 (Jan.) 1946.
7. Hunt: Am. J. Surg. 71:7237-727 (June) 1946.
8. Davis and Cheek: J.A.M.A. 131:816-819 (July 6) 1946.
9. Koch: Zentrall f and Gynak, 69-910-917, 1947.
10. Diddle and Bennett: Am. J. Obst. & Gynec. 55:669-675 (April) 1948.
11. Tyrone, Collins et al: South. M. J. 39:957-960 (Dec.) 1946.
12. Siddall: Am. J. Obst. & Gynec. 53:846-850 (May) 1947.
13. Corscaden, Fertig and Gunsberg: Am. J. Obst. & Gynec. 51:1-12, (Jan.) 1946.
14. TeLinde and Galvin: Am. J. Obst. & Gynec. 48:774-797 (Dec.) 1944.
15. Campbell: Am. J. Obst. & Gynec. 53:598-613 (Oct.) 1946.

478 Peachtree St., N. E., Atlanta.

EDWARD WEISS, M.D., Philadelphia, Pa.

EMOTIONAL *Factors in* HYPERTENSION

Hypertension is one of the commonest disorders of civilized life and results in the greatest burden of cardiovascular disease. After it has run its course of several years to a decade or more, it results in certain vascular changes that, in turn, produce changes within vital organs and bring about disability and death. We don't know much about the disease in spite of the epochal work of Goldblatt, and many others, regarding the disturbances of renal blood flow. This knowledge really hasn't advanced us very far in our treatment of this disorder. On the contrary, it has hampered us in one respect because it has placed even more emphasis on the physical aspects of the disorder. For years we have studied patients with hypertension with the blood pressure apparatus, ophthalmoscope, fluoroscope, electrocardiograph, and by means of renal function studies; now we have added the intravenous urogram and, in certain clinics, more refined methods of studying renal blood flow. All of this is proper but it is just the beginning; it is not the end of the study because patients with hypertension are usually anxious patients and their anxiety has some relation to their blood pressure.

We know that we must allow for the emotional element in individual blood pressure readings. It is also well known that rest and reassurance play a large part in the medical management of hypertensive patients, both in relief of symptoms and in reduction of the blood pressure level. The early symptoms of hypertension are frequently exactly those of a psychoneurosis (Ayman)[1]. Emotional stress often seems to precede the onset of hypertension, and anxiety bears a close relationship to the aggravation of existing symptoms in hypertension. Cardiovascular accidents frequently follow emotional traumatic experiences. Personality study often reveals a deep-seated conflict that stands in close relationship to anxiety.

So, empirically, we have learned that there is some relation between emotions and high blood pressure, but what is it?

During the past three years my associates and I have been engaged in a study of unselected, consecutive patients encountered in a hypertension clinic. To the usual physical and laboratory studies are added a social history, psychological tests, and psychiatric interviews. Although the study is aimed at the relationship between personality and hypertension a number of observations have been made upon the emotional problems of hypertension and some of these I wish to discuss.

It is obvious that these problems must be related to the pre-hypertensive personality and we have been impressed with the high incidence of emotional disorders existing in these patients prior to the development of their hypertension. Then emotionally disturbing events specific for the personality in question frequently act to precipitate symptoms that are attributed to the hypertension.

Headache—Janeway[2] observed that headache was

From the Department of Medicine, Temple University School of Medicine, Philadelphia.

Presented at the meeting of the Georgia Heart Association, Savannah, Sept. 15, 1951.

the most frequent symptom of which his hypertensive patients complained. He described the typical hypertensive headache, which appears on awakening, as consisting of sensations ranging from a dull ache to severe pounding distress usually located in the cervico-occipital region. But in addition, he noted that a surprisingly large number of patients had been subject to migraine throughout life. Gardner, Mountain, and Hines[3] found migraine 5 times as frequently in hypertensive patients as in a control group. Then there are a great variety of head pains, discomforts, and peculiar sensations, such as dullness and fullness with or without vertigo, that occur in hypertensive subjects and are often referred to as headaches. The tendency is to attribute all these "headaches" to the hypertension.

It is so easy for a practicing physician to slap a blood pressure cuff on the arm of a patient and say, "It's your blood pressure"; it is so difficult to spend time with a patient trying to find something out about the emotional life. Once the diagnosis of "high blood pressure" has been established attention is concentrated on the effort to "bring the blood pressure down." The patient demands to know the blood pressure figures; on each visit to the physician he waits with anxious concern to hear the latest reading and frequently he has ideas of "stroke," "heart failure," or "Bright's disease" in the back of his mind.

It is hardly necessary to detail what has been done to this poor fellow in an effort to "bring his blood pressure down." There was a day when protein, especially red meat, was held responsible, followed by a period in which his diet was rendered even more unpalatable by the withdrawal of salt. After a lapse of 25 years this salt-free era has been reestablished; only rice has been added. The palatability has not been enhanced by this addition. Then came a period when an avid search was made for "focal infection" and teeth and tonsils were sacrificed at a prodigious rate. Nor was the colon neglected in this search for "toxins," and "colonic irrigations" were very popular for a time. The patient is still often told to stop work and exercise, is denied alcohol and tobacco, and sometimes coffee and tea. Having been reduced to a vegetative existence the unfortunate hypertensive is now threatened with mutilation at the hands of the neurosurgeon who, during the last decade, has removed more and more of his sympathetic nervous system. All of this has gone on with hardly the slightest attention to the personality of the hypertensive individual and, of course, this concentration on "bringing the blood pressure down" has only added to the phobia of high blood pressure with all of its attendant secondary ills.

To return to the problem of hypertension and headache, certainly elevation of the blood pressure seems responsible for the so-called typical hypertensive headache. (Even here, however, the anxiety factor enters insofar as it is related to exacerbations of blood pressure.) However, the vast majority of peculiar head sensations and discomforts often designated as headache cannot be correlated with the blood pressure level itself. Here the emotional factor is directly related to the peculiar head sensations.

For example, a middle-aged woman had severe hypertension and headaches. Her physician sent her because he thought the headache was due to hypertension. She had had all the studies that have been described. The only thing she hadn't had was an opportunity to talk about herself as a person and after reviewing all these measurements, I said to her, "Sometimes tension is related to hypertension." She thought that over for a moment and said, "Well, I can improve on that formula. In my house, it is 'contention-tension-hypertension' ". And then she went on to tell of the role she played as a "buffer"—between an irate husband and a lazy son who was in business with his father and there was constant quarreling between them. She was always trying to shield her son; and, martyr-like, had to pay the penalty. This woman's headache was the "body-language" means of representing her difficult life situation. It was just as if she would say, "My husband is a headache to me." Indeed he was. He was having an extramarital affair and boasted of it openly. He felt that it was indecent to smoke or drink, but the sexual appetites were normal and were to be indulged, and no secret was to be made of the fact. This added to her problem by humiliating her in the presence of her friends. This was an intolerable situation for her. Perhaps as a result of the way this information was received uncritically, she gained enough confidence to present her husband with an ultimatum and, contrary to her worst expectations, he agreed to end the affair. It made a tremendous difference in her life. Thereafter, she was well as far as headache was concerned. It is true that this patient still has her hypertension. But the disappearance of the headache was an indication that the symptoms was out of proportion to the disease, and was related to the anxiety. The anxiety in turn was related to conflict and the conflict could be brought out by getting to know the woman as a human being and not just as a medical case.

Migraine presents a more complicated mechanism. It can hardly be assumed, as in the case of anxiety and hypertension, that migraine is so frequent in hypertension because the two are common disorders and therefore must frequently meet. Instead, there seems to be a common denominator and psychologic study gives a clue. Apparently there is an intimate relationship between the personality structure of the two disorders. Both present evidence of chronically repressed rage. Attacks of migraine occur when situations are met that intensify the rage, and the patient hasn't the ability for adequate expression.

Wolff[4] observed that the headache in subjects with hypertension bears no direct relationship to the level of blood pressure or pulse pressure. "The headache may be present when the blood pressure is relatively high, moderate, or low. By pressing the thumb upon the common carotid artery the intensity of the headache is reduced, with an accompanying decline in the amplitude of the pulsations. Decrease in the intensity of headache in the temporal region followed

similar pressure upon the corresponding temporal artery. Furthermore, when ergotamine tartrate did succeed in appreciably decreasing the amplitude of pulsations of the cranial arteries for a shorter or longer period, the intensity of the 'hypertensive' headache decreased despite the fact that the ergotamine tartrate considerably increased the already elevated systolic and diastolic pressures. If little or no reduction of the amplitude of pulsation of the arteries occurred, there was no reduction in the intensity of the headache. Hence, headache with hypertension likewise is influenced by agents that decrease the amplitude of pulsations of the cranial arteries."

Constipation—Most patients with hypertension see a connection between headache and bowel function. When they suffer from constipation they are ill, and when the bowel moves freely they are speedily relieved of symptoms. This, of course, is true for many patients who do not have hypertension, but in hypertensive individuals the relationship is especially obvious. Moreover, it is a relationship that is easily exploited and in which the physician becomes a pathogenic agent when he focuses attention on the bowel, as in the days, fortunately not now so common, when colonic irrigations were frequently prescribed for "autointoxication."

A technic, frequently used by physicians who try not to alarm their patients regarding the blood pressure, is to have a topic ready that will engage the interest of the patient at the moment that the blood pressure estimation is completed, when the patient usually is eager to know the result. Many physicians have found that the best way to deflect this interest, especially in women, is to ask a question concerning the bowel function. The patient then becomes so interested in discussing this topic that she forgets, for the time being, her concern about the blood pressure reading.

It is very difficult to overcome a patient's prejudices—and even those of the medical profession—in this regard. But attributing the headache to the constipation does seem to be largely a psychological association, because relief comes too quickly after a bowel movement to be ascribed to physical causes, and, in addition, deeper psychologic study often shows the relationship between ideas of obstruction, "poisoning," and pain in the head.

Vertigo—Patients frequently refer to the symptom of vertigo, which occurs in a great many instances with the head discomforts just described, as dizziness and giddiness. Differentiating syncope, which does not imply a disturbance of equilibrium, and true Meniere's syndrome, one often finds that the symptom of vertigo bears a definite relation to an anxiety state. Frequently in association with ringing in the ears and sometimes with numbness and tingling of the extremities, it is the result of psychic stress.

The early symptoms of anxiety are usually expressed through the cardiovascular; respiratory, gastrointestinal, and genitourinary systems. It is after the anxiety state has persisted for some time that the symptom of vertigo makes its appearance. When it occurs in association with hypertension the vascular disease often is held to be responsible. However, it is well to bear in mind that, like organ language elsewhere, vertigo (unsteadiness) frequently is the symbolic representation of insecurity and indecision and this is just as true when it occurs in association with hypertension.

A woman of 55 with a moderate elevation of blood pressure and pronounced symptoms of cardiac neurosis recently suffered an attack of severe vertigo. She was thoroughly studied at the hospital and no evidence of organic disease, other than moderate elevation of blood pressure, was found. The study included a complete neurological survey.

As I was leaving her room after the last interview a casual comment seemed to have more bearing on the vertigo than all of the examinations just completed. In the course of the conversation she said, "You have much to live for (meaning the profession of medicine) while I have nothing."

She had always aspired to a career in medicine, encouraged by a dominating mother who directed her own ambitions to the daughter. Instead she married a man whom she idealized as a perfect person "not primarily interested in woman as a sexual object" only to find that he made constant sexual demands. She never attained sexual gratification but had 5 children in rapid order. She devoted herself to her children, now grown, and following the death of her mother from heart disease, she developed a mild depressive reaction from which she had not recovered. The discovery of the hypertension permitted her to focus her anxiety upon her heart and the fear of death from a "stroke."

With psychotherapy she was able to recognize and express the hostility against her husband but she had more difficulty with her guilt-laden death wishes against her mother. It was with great difficulty that she was able to see her mother's domination and her own need for her mother's love, which had determined her pattern of submission, the development of unconscious wishes for her mother's death to relieve herself of this burden, and the ensuing guilt, which increased her own need to act the dutiful daughter. Then from this identification she punished herself with her mother's symptoms of heart disease, especially after anything that she considered self-indulgence or ostentation. After the heart "pain" there was a secondary depression associated with her feelings of helplessness and inadequacy.

During the course of treatment her depression diminished and she was able to engage in more activities, such as joining a class in music appreciation from which she derived great pleasure. The atmosphere at home improved. Then on her own accord she suggested diminishing the frequency of her visits to the psychiatrist and immediately after this had the attack of severe vertigo that resulted in the hospital study. We thought of the symptom as representing symbolically her fear that she might not be able to maintain her balance without supportive therapy but perhaps on a deeper level it had to do with fear of "falling" in a sexual sense. Certainly unconscious depreciation of feminity colored her whole

life as a disappointment that could not be fulfilled. The substitution was to have children and be a perfect mother but with her children grown and no longer needing her care the illness was precipitated by the death of the mother with whom she was strongly identified. When she no longer had the gratification of motherhood the pains in the chest acted as a constant reminder of her inadequacy. They mean, "I can never hope to attain the goal that mother wanted for me," and a life of leisure and self-indulgence only added to her woes.

Cardiac Neurosis—Pain in the precordium, palpitation, dyspnea, and fatigue are a group of symptoms frequently associated with the cardiac neurosis that occurs in patients with hypertension. Fatigue may be a prominent part of the clinical picture, in fact, the most prominent symptom, although again and again the patient speaks of pain in the heart region and only after considerable discussion is it brought out that really the most important symptom is fatigue, that it occurred first, and that only later was the pain added. One of the commonest causes of fatigue is emotional conflict, which steals energy that then is not available for useful purposes.

When these symptoms are present with a normal cardiovascular system and the general medical examination otherwise is negative, it is not as a rule difficult to assign them to their proper sphere—the emotions. When hypertension is present, however, it is almost invariably held to be the responsible factor. It is under such circumstances that psychosomatic study will frequently reveal that symptoms are out of proportion to disease, that there is much conflict in the personality makeup, and that it depends on repressed hostility. Moreover, a specific as well as a temporal relationship will be found between the onset of the symptoms and an emotionally disturbing event.

Thus in regard to symptoms in association with hypertension one must always question their relation to the high blood pressure itself and make an effort to understand them from the viewpoint of behavior.

When pain in the chest is associated with hypertension in a middle-aged individual, and especially in the presence of physical evidence of cardiovascular disease, the problem becomes a very difficult one from the standpoint of management. It is all very well to advise a young person with moderate elevation of blood pressure and no evidence of cardiovascular disease "to carry on in spite of symptoms" and encourage him to do the things that other people do. But in the presence of electrocardiographic evidence or other indications of myocardial disease, one assumes a heavy responsibility in encouraging such patients to carry on, and yet to caution rest on the one hand and try to give reassurance on the other is so often worse than useless. To the young physician treating such a patient, and to psychiatrists as well, it poses a very difficult problem; the sudden death that may occur in patients who have been encouraged to carry on may bring the criticism of the community down upon the head of the unfortunate practitioner. And yet to play into the unconscious fears of patients by cautioning rest and more rest leads to greater and greater degrees of invalidism. Moreover, as the patient waits for his arteries to harden the questionable benefit of the physical rest is more than offset by the physiologic burden provoked by psychic stress. The only advice that I can offer in this regard is that the patient must be evaluated as carefully as possible both physically and psychologically and then an effort made to advise him correctly regarding his activities. Tension of emotional origin is just as burdensome to the cardiovascular system, if not more so, than effort of physical origin (Wolf and Wolff)[5].

Psychosomatic Aspects of Treatment

The knowledge that "every psychic tendency seeks adequate bodily expression" gives a practical hint in dealing with hypertensive patients. An explanation to the effect that inner tension that cannot be released through ordinary channels (action or words) may manifest itself in the circulatory system by adding to the problem of hypertension represents a rational approach insofar as the patient is concerned. This often leads to a discussion of problems that are of considerable interest and importance from the standpoint of illness.

The psychosomatic concept of pathogenesis and the clinical picture must impress us with the necessity for the total evaluation of the patient with hypertension. This requires more than lip service to the concept of the organism as a whole. It represents a combined physical and psychologic study. Because incapacity often is out of proportion to the disease it will be found important in a great many patients to re-educate them along the lines of "carrying on" rather than to urge rest and more rest. We must free them from the phobia of their blood pressure, with its attendant fears of "stroke" and heart failure, and allow them to express their aggression along more nearly normal channels.

One may say to patients who have hypertension and anxiety (due to the meeting of inner conflicts and external pressures) that our objective in their management is to "take off some of the load." If we can do this by helping them to achieve some insight into their emotional problems, with consequent lowering of tension, well and good; if we can do it by environmental manipulation, fine; but if we have to resort in addition to drug therapy or to surgery (sympathectomy) by all means let us use a combination of efforts to help our patients. While I know of no evidence that well-established essential hypertension can be eradicated by any psychotherapeutic process, no matter how intensive or prolonged, I also feel that almost every patient with essential hypertension can be benefited by psychotherapy.

Although the psychosomatic approach does not offer a complete solution of the hypertensive problem and does not even apply to all patients, it is a practical method of dealing with a set of important factors that may be modified, whereas the constitution of the individual cannot be touched. It is an approach heretofore not sufficiently practiced. We are too much concerned with physical measurements in hypertension and too little concerned with the emotional life, which often holds the key to the satisfactory management of the hypertensive patient.[6]

Summary

The organic tradition in medicine has been responsible for a narrow physical view of the etiology, pathogenesis and treatment of essential hypertension. The psychosomatic approach does not neglect the physical problems involved but includes a consideration of the role of the emotions. It emphasizes the multiple factors in etiology and pathogenesis and attempts to evaluate the resulting composite clinical picture. Such studies indicate that the emotional component apparently is intimately related to the development of hypertension in some patients, to the production of symptoms in many others, and enters into the question of treatment in nearly all patients with this disorder.

Although all varieties of character and neurotic disturbances occur in hypertensive individuals, a common problem seems to be the presence of emotional tension due to chronic repressed hostility. This inhibited aggression (chronic rage) seems to bear a definite relationship to hypertension and, if it can be turned outward by means of psychotherapy, anxiety is diminished and blood pressure is often lowered. Even if blood pressure is unaffected, the treatment often benefits the patient by making him a healthier and more effective personality. Our objectives in treatment should be readjusted. We must do more than try to bring the blood pressure down. We must go beyond the physical aspects of hypertension to the personality of the hypertensive individual in order to be successful in the management of such patients.

REFERENCES

1. Ayman, D.: Arterial Hypertension, New York, Oxford University Press, 1948.
2. Janeway, T. C.: Arch. Int. Med., 12:755, (Dec.) 1913.
3. Gardner, J. W., et al.: Am. J. M. Sc., 300:50, (July) 1940.
4. Wolff. H. G.: Headache and Other Pain, New York, Oxford University Press, 1948.
5. Wolf, G. A., Jr., and Wolff, H. G.: Psychosom. Med., 8:239, 1946.
6. (a) Weiss, E., and English, O. S.: Psychosom. Med. ed. 2, Philadelphia, W. B. Saunders Company, 1949; (b) Weiss, E.; Emotional Factors in Cardiovascular Disease, Springfield, Ill., Charles C. Thomas, 1951.

J. B. NEIGHBORS, M.D., and *J. A. GREEN, M.D.*, Athens

POPLITEAL ARTERY OCCLUSION

Presumably by Pressure from Organized VENOUS CLOT

In reviewing the literature of the past ten years we have found no report of occlusion of any artery by pressure from an organized clot in a concomitant vein. If we had realized the possibility of such an occurrence, it might have been diagnosed in our case and the patient's leg saved.

Case Report

Mr. J., aged 68 years, consulted one of us (J.B.N.) in August, 1949, complaining chiefly of indigestion. He had noted some shortness of breath on exertion. He had a cough, which he attributed to smoking, but he had never coughed up any blood. He complained of discomfort in his legs and feet. He thought he had arthritis. He could not state clearly that exertion had any effect on the pains in his legs.

He weighed 247 pounds. The arterial pressure in each arm was 160/100. Physical examination was essentially normal for his age. Varicose veins, apparently not severe enough to warrant surgery, were present in each leg; the examiner thought that some of his discomfort might have been coming from the veins. There was no edema.

About three months after the first visit the patient returned complaining of increasing shortness of breath. At this time a diagnosis of arteriosclerotic heart disease with auricular fibrillation and congestive heart failure was made. He was digitalized and placed on a reduction diet low in sodium. His weight came down to 218 pounds.

He got along well for about two years. Then, while on a fishing trip, he neglected his diet, and edema and shortness of breath developed. He was treated in the hospital, but the fibrillation persisted. No steps were taken to correct it. While in the hospital the patient complained of pain in the

From the Athens General Hospital, Athens.

right leg, around the knee, and below into the foot. The discomfort did not seem to be related to exercise, and it was not felt to be due to circulatory disturbance. The pulses were palpable. The leg pain was not a new complaint, however; he had been using a cane prior to coming to the hospital.

After Mr. J. had been in the hospital about a week, the discomfort increased in intenstiy and seemed to be more pointedly in the foot and calf. One night he experienced an excruciating pain in the foot and calf which required morphine. Neither pulse was palpable in the right foot. Oscillation of mercury was present only at the knee. In the popliteal space there was a very large pulsation suggesting an aneurysm. Occlusion of the artery, perhaps in the lower part of the space or just below this was apparent. The extremity was kept cold. Later the pulsation behind the knee disappeared. At this time we thought the femoral artery was also involved. Progressive color changes occurred in the leg and foot and a mid-thigh amputation was done. The patient made an uneventful recovery from the operation, but he died suddenly some four months later.

Discussion

The amputated leg was dissected. When the popliteal space was opened, we found a large varicosed thrombotic popliteal vein measuring 16 cm. long by 3 to 6 cm. in width. This mass completely occluded the popliteal artery at the inferior aspect of the space. The walls of the artery were completely pressed together, producing a functional occlusion. There was no thrombus. The walls of the artery itself showed only minimal arteriosclerotic change. (Fig. 1).

The organized clot was hard enough to produce a functional occlusion of the artery. There was some propagation of the thrombus proximally in the vein, but this was definitely more recent.

It was of some interest to speculate as to how long this thrombus in the popliteal vein had existed. The clot may have originated in an old deep thrombophlebitis and which might have been aggravated by the hospitalization. The prominent superficial veins had not changed appreciably since this patient had been under our care; they may have been compensatory. The pathologist stated that there was no blood flow through the popliteal vein at the time of amputation.

This case raises the question as to whether it could have been possible to have removed this thrombotic vein mass and possibly saved a limb. The diagnosis of such a condition might be extremely difficult before operation because occlusion of the artery from any cause would present the same findings distal to the occlusion. If this diagnosis could be entertained, and if it were felt that the superficial system was intact, an exploration of the popliteal space might be in order prior to amputation.

The initial attacks of pain could have been due to vasospasm of the artery, but, finally, there is no question in our minds but that the occlusion was completed by the thrombotic mass.

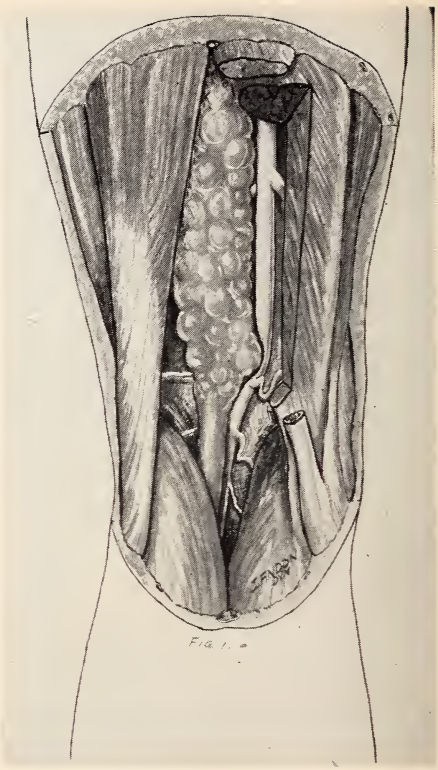


Fig. 1. Illustration showing complete occlusion of popliteal artery, and large thrombotic mass in popliteal vein.

Summary

A case of functional occlusion of the popliteal artery presumably by pressure from a thrombosed popliteal vein is presented as an unusual occurrence. The mechanism of its formation is open to question. It is hard to realize that a thrombotic vein could occlude a reasonably normal popliteal artery, but such was the case in this patient.

Acknowledgement: We are indebted to Dr. L. L. Landon, Department of Veterinary Medicine, University of Georgia, who made the accompanying sketch from our description.

102nd Annual Session, Medical Association of Georgia, May 11-14, Atlanta Biltmore Hotel

DONALD S. BICKERS, M.D., Emory University

Clinical

ELECTROENCEPHALOGRAPHY:

A Diagnostic and Prognostic Aid

Electroencephalography, the science of recording and interpreting human brain waves, has had a strange history in its progress from laboratory to bedside. Almost neglected for sixty years, the technique was applied to the human brain with such success that the past fifteen years have established it as a practical aid to the clinician in diagnosis and treatment of neurological disorders.

In 1874 Richard Caton,[1] using a mirror galvanometer, discovered fluctuating electrical potentials in the cerebral cortex of animals. He related these changes to cortical function. Though sporadic confirmatory reports appeared, it was not until the advent of the Einthoven string galvanometer in 1906 that the way was opened for the next major advance. Prawdicz-Neminski began a series of studies which resulted in his report in 1925[2] on what he named the "electrocerebrogram". He found rhythmically fluctuating electrical potentials from skull, dura and cortex whose main frequencies were 10-15 per second ("first order") and 20-32 per second ("second order"). Practical application of the technique was made in 1924 when Hans Berger recorded the first human EEG. His first report in 1929[3] was one of a series in which electroencephalography was named and widely explored. His work received little attention or credence until 1934 when Adrian and Matthews[4-6] confirmed his findings with a vacuum tube amplifier and ink-writing oscillograph. With the report of Gibbs, Davis and Lennox on EEG changes in epilepsy (1935)[7] and that of Walter on EEG localization of brain tumors (1936)[8] the modern era of clinical EEG was inaugurated. Since that time much information, largely empirical, has been accumulated. More recently, collaboration of all neurological disciplines has begun to yield increasing insight into the mechanisms underlying the EEG in health and disease.

General Considerations

The key to understanding the EEG lies in the basic functional properties of nerve, excitability and conductivity. While these properties are not unique to nerve, it is here that they are most highly developed. The passage of a nerve impulse is indicated by the presence of an electrical charge, or "action potential". The rise and fall of this potential follows a curve or "wave" when plotted against time and its form varies with the type of fibre and the mode of recording. This potential represents a self-propagating depolarization (negativity) of the surface membrane of the nerve, which on reaching the cell body of the neurone via dendrites, may by the same mechanism cause the nerve cell to "fire". This potential is in turn passed along the axone to influence an effector organ or other nerve cells. In the central nervous system, aggregates of nerve cells tend to discharge together in rhythmic "beats": e.g., the respiratory center. In the cerebral cortex this tendency is especially well developed and gives rise to rhythmically fluctuating electrical potentials which spread over the cortical surface somewhat like ripples on a pool. These have been termed "spontaneous" rhythms. They are thought to represent the sum of slightly asynchronous discharges of many cortical cell groups.[5] Unlike the discharges of individual cells, these asynchronous discharges are of sufficient magnitude to be recorded from the scalp. On the surface of the head, having been attenuated in voltage and altered in shape by resistance of dura, skull and scalp, the potentials have a value of 5-100 microvolts and resemble a sine wave. Dead nerve cells produce no waves, but damaged cells may give rise to abnormal discharges. Both states may be utilized advantageously by the clinician through the eletcroencephalograph.

Technique and Material

The completed EEG involves the perception, magnification and recording in convenient form of the tiny electrical currents produced by the brain. This is accomplished by attaching small silver discs to the scalp and ears by means of collodion in standard positions (fig. 1). Resistance of less than 10,000 ohms at point of contact is made by means of salt paste. If lesions about the base of the brain are suspected pharyngeal lead may be placed under local (1 per cent Nupercaine) nasopharyngeal anesthesia. The patient lies relaxed under constant observation in a shielded darkened room from which street noises are not excluded. From the electrodes light wires connect with the input circuit of a

From the Electroencephalographic Laboratory and the Department of Surgery, Emory University School of Medicine, Emory University.

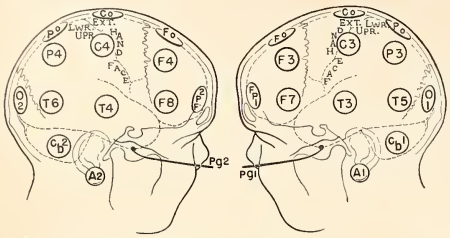


Fig. 1. *The standard electrode positions*: Fp—frontal pole, F—frontal, C—central, T—temporal, P—parietal, O—occipital, A—ear, Pg—pharyngeal, Cb—cerebellar. (Modified after Jasper).

Grass Model IIID 8-channel inkwriting oscillograph. Since each channel (fig. 2) is an autonomous unit which records changes of electrical potential between any two electrodes, the 8-channel instrument permits simultaneous recording from any 8 pairs of electrodes. Voltages between paired electrodes increases with the distance between them and the reverse. Widely-spaced electrode pairs are valuable for more general information; closely-spaced ones for more accurate localization of focal disturbances. Accuracy can be increased considerably by arranging the closely-spaced pairs serially across a suspected area to determine whether *phase reversals* are present (fig. 3). This technique is based on the fact that the site of origin of an electrical disturbance in the cortex becomes negative (i.e., "depolarized") with respect to surrounding regions, and the central peak of the potential gradient (negativity) falls off in all directions. If the electrode pairs be arranged linearly across this peak the negativity will be seen to increase toward the peak, then reverse sign (phase) and decrease (i.e. become more positive with respect to the peak). The amplifier for each pair of electrodes, acting as a galvanometer, is so constructed that when electrode No. 2 (to G^2) is negative with respect to electrode No. 1 (to G^1) a downward deflection of the pen results. The reverse produces an upward deflection of the pen so that a *phase reversal* point is marked by converging ("A" in fig. 3) and diverging ("B" in fig. 3) waves, that is, they are 180° *out of phase*. A check on the validity of the reversal can be made by arranging

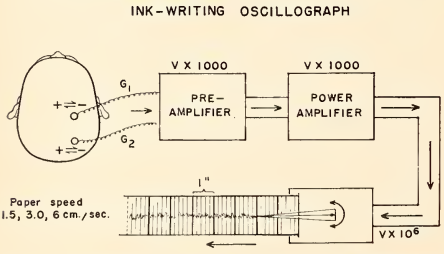


Fig. 2. Diagramatic sketch of the *ink-writing oscillograph*. Signal picked up at scalp electrodes passes to grids (G_1 and G_2) of push-pull pre-amplifier where it is magnified 1000 times, thence to power amplifier where it is again magnified 1000 times. This voltage is sufficient to activate the electromagnet mounted between permanent magnet poles of the oscillograph. Changing polarity of the electromagnet imparts rotary motion to the pen shaft.

two lines of electrodes which intersect at right angles over the suspected point. A true *focus* is marked by phase reversals at the point in both lines. A variation on the phase reversal technique is the more complicated surface triangulation technique. Here the angle nearest the focus shows maximal disturbance.[9] A recent technique advanced by Gasteaut is triangulation in the coronal planes (midline-to-side, side-to-side, side-to-midline). This electrode arrangement is particularly useful in locating deep-seated cerebral disturbances.

Activation procedures[10] designed to enhance existing abnormalities or bring out latent abnormalities not present in the routine resting record may be performed. Among these are hyperventilation, sleep (natural[11] or barbiturate-induced[12]), intravenous Metrazol and flickering light[13 14]. The method selected varies with the presenting problem. Care is exercised to minimize extraneous influences which may produce artefact in the record. The most common are potentials from facial and neck musculature, eye movement, movement of the patient or electrodes, EKG, sweating and 60 cycle "ripple" from electrical mains. The value of the record depends in large measure on the skill and patience of the operators.

The records samples shown are taken from the 500 records made in the EEG Laboratory of the Emory University School of Medicine in the past 18 months.

The Normal EEG

From the immense amount of statistical data available, generally accepted "normals" have emerged.[15 17] These are based, with respect to age, primarily upon the form, frequency, amplitude, phase relations and

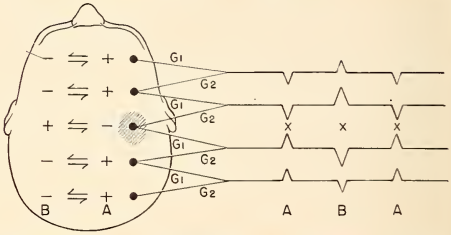


Fig. 3. The principle of phase reversal in location. (Modified after Jasper[17]).

distribution of waves. The record is a complex of a number of frequencies which may be analyzed either visually or instrumentally.[18 19] Ranges have been designated with Greek letters as a matter of convenience.

1. Alpha: 8-13 per second, usually 20-60 microvolts in amplitude in adults where it is most prominent over the parieto-occipital regions. The alpha rhythm is blocked by attention, particularly visual, and is best developed in patients who are relaxed with their eyes closed.

2. Beta: 15-30 per second, most frequently 18-25 per second, of lower (5-30 microvolts) than alpha, it is most constant about the central fissure area of the cerebrum.

3. Gamma: 35-55 per second. Rarely seen, its significance is not understood.

4. Theta: 4-7 per second, predominant occurrence in parietotemporal regions, and is normal in drowsiness.

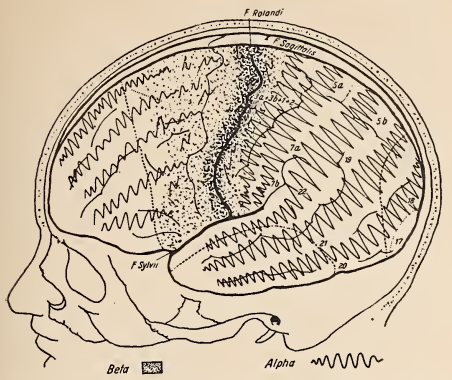


Fig. 4. Schematic drawing of cortical distribution of alpha and beta (stippled) frequencies. (After Jasper and Penfield[23]).

5. Delta: 1-3 per second, with no predominant distribution, is always considered pathological in waking, resting adults but may be normal in children. Some workers classify all frequencies in the 1-7 per second range as "delta".

The complete standardization of recordings from so labile an organ as the brain is impossible, but a workable compromise can be had in a "resting" record. This is taken while the patient lies relaxed, but awake, with eyes closed in a quiet, darkened room. Under these conditions the EEG is seen to change progressively from infancy to maturity. In the newborn infant some rhythmic activity is present around the central fissure[20 21] and frontal and occipital rhythms appear at 3 to 4 months of age.[22] Growth and maturation is reflected in the EEG by faster frequencies, greater rhythmicity and stability and somewhat lower amplitudes (table 1). The "adult" form is usually reached between the ages of 10-12 years. Frequency distribution data obtained by means of direct cortical recording (electrocorticography) indicates some correlation between cytoarchitecture, function and frequency[23] (fig. 4). Adult "resting" records consist of alpha and beta waves (fig. 5) or either alone.

An important principle emerges from study of variations in the normal EEG: i.e., synchrony tends to vary inversely with the state of cortical activity. Thus the alpha rhythm tends to be suppressed by anxiety, external stimuli or trying to see, and becomes prominent in relaxation. In drowsiness and sleep, characteristic progressive slowing appears (fig. 6).

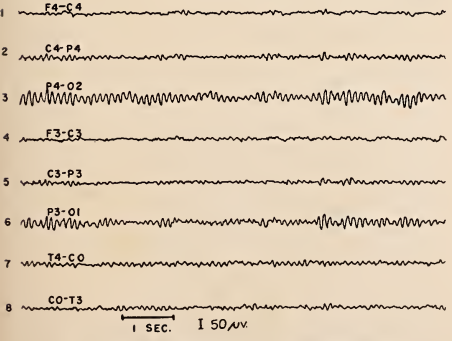


Fig. 5. Normal waking EEG: 17 year old male.

Effect of Biochemical Changes

As a record of nerve cell action potentials, the EEG is a sensitive indicator of changes in cerebral metabolism. Normal brain function requires a continuous supply of oxygen, hormones, vitamins, glucose and other nutrient materials as well as the removal of waste products of cell metabolism. This in turn depends on the integrity of the cerebral blood supply and circulation. The EEG reflects both cerebral and systemic states. Unfortunately for our convenience, many of these changes are not specific but valuable information may be obtained from their presence and location. Depression of cortical function, indicated by slowing of the EEG, may result from anoxia,[24] hypoglycemia,[25] magnesium salts, hyperventilation[26] and excessive hydration.[27] There may be accompanying impairment of consciousness which is roughly related to the degree of slowing. Some correlation has been noted between alpha rhythm frequency and the basal metabolic rate in myxedema and hyperthyroidism.[28] Abnormally slow waves are seen in Addison's disease,[29 31] and Thorn et al,[32] consider the EEG in this disease to be one of the

Age	No. of cases	Mean freq./sec.	Range/sec.
4–11 mos.	17	5.3±0.2	3.5– 6.6
1– 2 yrs.	23	6.5±0.1	5.5– 7.4
3– 4 "	20	7.4±0.1	6.2– 8.9
5– 6 "	21	8.3±0.1	7.5– 9.2
7– 8 "	23	8.5±0.1	7.5–10.3
9–10 "	21	8.8±0.1	7.5–10.2
11–12 "	18	9.3±0.2	8.4–10.4
13–14 "	17	9.3±0.2	8.3–11.0
15–18 "	17	9.5±0.2	8.2–11.1
19–30 "	23	10.2±0.1	9.0–11.0

Table 1. Relationship between alpha frequency and age. (From Bernhard, C. G., and Skoglund, C. R.: On alpha frequency of human brain potentials as function of age, Skandinav. Arch. f. Physiol. 82, 178-184, 1939.)

most sensitive indices of improvement under therapy.

Effect of Drugs on the EEG

The application of EEG and related neurophysiological techniques to the study of drug actions has added much to our knowledge of neuropharmacology. Most of the practical applications of this information centers about the cerebral depressants, which tend to slow the EEG, and stimulants, which accelerate it. Among the depressants are ether, chloroform, nitrous oxide, cyclopropane, opiates, Demerol,[33] alcohols and the anticonvulsants: Dilantin, Tridione, and Mesantoin. After initial acceleration[34] barbiturates also produce slowing. Among the cerebral stimulants are Metrazol, caffeine, picrotoxin and strychnine. Because of this stimulating effect, Metrazol is widely used to activate the EEG.

The Abnormal EEG

The abnormal EEG is so designated because it deviates from the normal criteria in one or more respects. Disturbances of normal rhythms have been termed "dysrhythmias".[35] Like normal frequencies, these may be described as to frequency (too fast, too slow), form, amplitude (too high, too low), location, occurrence (continuous or intermittent) rhythmicity (regular or random) and phase relationships to other regions.[36] Valuable information may be obtained as to: (1) presence or absence of pathophysiological brain activity, (2) location and (3) indications in some cases of the nature of the lesion causing the abnormal activity. While the EEG is not pathognomonic, some rules of thumb are helpful. Infiltrating or irritating lesions tend to cause faster waves or seizure discharges; destructive lesions slowing or absence of waves. EEG changes with destructive lesions can be to some extent related to the rapidity of onset and severity of cortical damage.

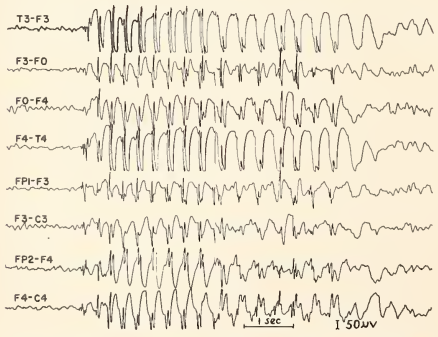


Fig. 7. Minor idiopathic ("petit mal") seizure: 13 year old firstborn female with negative family history, minor attacks, characterized by brief absence, 4 years; major tonic-clonic seizures with tongue-biting and incontinence, 1 year. During 3/sec. spike and wave burst shown, hyperventilation ceased, was resumed immediately thereafter. Physical examination and skull films negative.

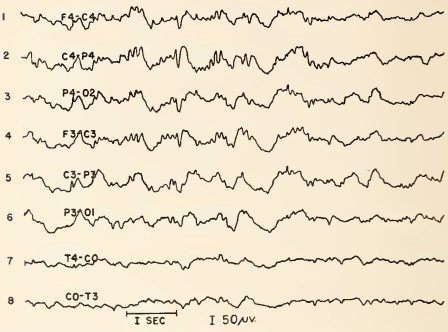


Fig. 6. Normal EEG: moderately deep sleep; 36 year old male.

Epilepsy

The EEG is most useful to the clinician in the convulsive disorders. As an objective record of the cerebral "electrical storm" responsible for seizures, the tracing furnishes corroborative evidence in simpler clinical diagnoses and may be decisive when the diagnosis is obscure. The distinguishing characteristic of the EEG in epilepsy is the presence of explosive cerebral electrical discharges which may be termed "paroxysmal hypersynchrony".[17 37] It will be recalled that normal waves are thought to be produced by slightly asynchronous firing of the contiguous groups of neurones. If a sufficient number of these groups "fire" simultaneously, the resulting wave has abnormally high voltage and may take bizarre forms.[17 37] The development and nature of the clinical seizure depends upon the distribution and intensity of these cerebral discharges. If there is no accompanying clinical seizure, the discharges are termed "electrical seizures" or "epileptiform activity without clinical seizures". The fastest discharge (less than 50 milliseconds) results in a "spike"; somewhat slower ones in "sharp waves". These may be single or multiple, rhythmic or random, or may be associated with random or rhythmic slower frequencies in a variety of combinations. The form and distribution of the wave depends upon the site of origin of the disturbance ("focus"), the neuronal circuits involved and the position of the recording electrodes. As knowledge of pathophysiological mechanisms has increased, classification of the EEG findings in epilepsy has become more complex.[7 17 37 39] Jasper and Kershman[39] have recently named three main types of epileptiform activity in the EEG: I. Focal cortical. II. Projected subcortical. III. Diffuse dysrhythmias. This information is helpful to the clinician in several ways:

1. In determining whether the presenting complaint is due to a convulsive disorder. Seizures take many forms, some of which are deceptive, and can be very difficult to distinguish from non-convulsive disorders. These may prove to be hysteria, syncope or psychiatric disorders rather than true con-

vulsive seizures. The EEG changes may be the only positive objective findings in such diagnostic differentiation.

2. In distinguishing between idiopathic (cryptogenic) epilepsy (fig. 7) and symptomatic (acquired) seizures (figs. 8-9). The idiopathic forms of epilepsy (petit mal, myoclonic petit mal and grand mal) generally fall into Group II and the symptomatic seizures into Groups I and III. There are exceptions in that midline or brain stem lesions may produce bilaterally synchronous discharges, and patients with bilaterally synchronous discharges may show focal abnormalities in sleep.[11] The exceptions serve to emphasize the need for interpreting the EEG in the light of the presenting clinical picture. Percentile distribution of types depends much on technique and material of reporting laboratories.[40 41] The distinction has great practical importance since treatment of

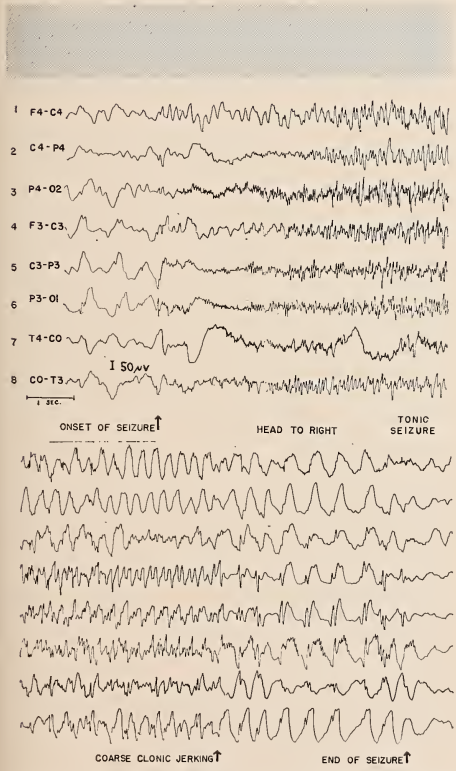


Fig. 9. Major temporal lobe seizure: 5 year old boy admitted in status epilepticus with right hemiparesis, right central facial weakness and depressed right deep tendon reflexes. Focal minor and increasingly severe major seizures since age of 18 months, beginning about right eye, tongue and face, spreading to involve right hand, upper and lower extremity in minor attacks; unconscious adversive tonic-clonic major seizures. Note rapid spread of spikes over entire cortex in tonic phase, rhythmic grouped discharges in clonic phase. Sixty seconds elapse between strips. Left temporal (T_3) spikes in interseizure record.

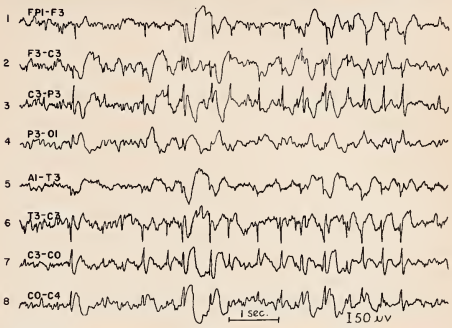


Fig. 8. Minor focal seizure (epilepsia partialis continua) of right face: right-handed 9 year old boy, firstborn, forceps delivery, had a major seizure on second day. Normal development until onset of minor and major focal seizures beginning in right face and tongue at age of 2 years. Physical examination normal except for twitches in right face; pneumo-encephalogram and left carotid arteriogram normal. EEG showed an active left precentral epileptogenic focus (C_3). Spike discharge was often accompanied by right facial twitch.

idiopathic seizures is entirely medical, whereas symptomatic seizures may require further investigative procedures to ascertain their cause. In that event the localization furnished by the EEG is helpful in choosing the methods to be used.

3. As an aid in choosing anticonvulsant medication. Generally petit mal and myoclonic petit mal respond to Tridione and Paradione, the others to Dilantin and Mesantoin with or without phenobarbital. As a corollary, the EEG aids in evaluating the response to medication.

The clinical course of convulsive disorders is fluctuating and unpredictable and this feature is a source of great concern to those so afflicted. This characteristic is reflected in EEG findings in that all patients with a history of seizures do not show epileptiform activity in routine EEGs. Unless the patient has a clinical seizure during the recording, diagnosis rests upon the presence of interseizure epileptiform activity. The more frequent the clinical seizures, the greater the likelihood of a positive EEG. Gibbs et al.,[38] found positive EEGs in 38 per cent of unselected epileptics in which hyperventilation was the only activation method used. Anticonvulsant drugs may suppress seizure discharges and should be discontinued 48 hours prior to recording the EEG. If the seizure problem is too severe, hospitalization may be a safer course. Serial EEGs and activation procedures increase the percentage of positive findings in those instances in which a positive differential diagnosis is imperative.

Intracranial Tumors

As a method of locating focal cerebral abnormalities, the EEG has been widely used in studying brain tumor suspects.[42] Though less accurate than pneumoencephalography and ventriculography, the method has the advantages of being painless, without risk and can be used as an outpatient procedure.

Cerebral tumor tissue is itself electrically inactive. The EEG changes (fig. 10) are due and, to some

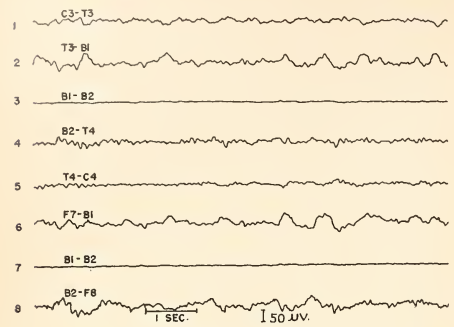


Fig. 10. Glioblastoma multiforme, left temporal lobe: 37 year old male with progressive headache for 3 months, blurred vision for 6 weeks. On physical examination there was mild confusion, 2 diopters of papilledema, right central facial weakness and increased deep tendon reflexes on right. EEG showed a large delta focus in the left temporal region diminishing in surrounding regions. Note deep extent of abnormality shown on left pharyngeal lead (T_3-B_1), confirmed at operation.

degree, proportional to secondary effects of the expanding mass on the surrounding brain through infiltration, compression, destruction, circulatory changes and local cerebral swelling. Increased intracranial pressure does not affect the EEG unless it is accompanied by stupor.[48] Rapidly growing tumors tend to produce greater EEG abnormalities than the slower. This fact may thus give suggestive information as to tumor type.[44 46] It is of practical interest that those tumors (meningiomas, pituitary adenomas and acoustic neurinomas) which are most difficult to localize with the EEG are the ones most commonly found on routine skull x-rays.[47] The two techniques are to some extent complementary. Accuracy in locating supratentorial tumors ranges from 39 per cent in early studies[48] to 88.4 per cent in a recent series.[49] Tumors involving the cortex most often produce focal EEG abnormalities. When deeper structures are involved, there is increasing tendency to bilaterally synchronous EEG changes.[50] This permits suggestive location of deep or midline lesions. Pharyngeal electrodes may yield decisive data in such problems. Posterior fossa tumors are not accurately located by the EEG.[51 52] Focal epileptiform discharges may point the way to hitherto unsuspected neoplasms, of which astrocytomas and meningiomas are the most common types. In the differential diagnosis between vascular and neoplastic brain lesions which is so often difficult, serial EEGs may be helpful. EEG changes due to tumors tend to progress while those due to vascular lesions tend to decrease.

Vascular Lesions

EEG abnormalities due to vascular lesions are frequently dramatic, as might be anticipated from the factors influencing the normal. The location, intensity, duration and rapidity of onset of the circulatory disturbance influence the character of the changes. Thrombosis[53] and embolus of cerebral arteries distributed chiefly to cortex may be evidenced by focal electrical silence or slow delta and theta waves over the areas deprived of blood which clears progressively in days or weeks. The location of the focus suggests the vessel involved: anterior cerebral in frontal pole disturbances, middle cerebral in posterior frontal, temporal and parietal, and posterior cerebral in the occipital foci. Deeper lesions which involve the internal capsule without damaging cortex may cause profound neurological deficits with little or no change in the EEG. In simple subarachnoid hemorrhage, mild diffuse changes (usually low voltage fast activity) are seen in the acute phase[54] and these changes may reflect the anxiety and discomfort of the patient. Focal abnormalities appear in meningo-cerebral hemorrhage. Intracerebral hemorrhage, when not rapidly fatal, is accompanied by marked focal EEG changes (fig. 11). These may be indistinguishable from the changes caused by highly malignant intrinsic tumors. Aneurysms produce focal findings in the EEG if their location and size is such as to cause cortical damage. Arteriovenous malformations may show focal low voltage and minor slowing, but more pronounced changes are seen when the adjacent cortex is involved in thrombosis, hemorrhage or is the site of seizure discharges. Venous thrombosis produces EEG abnormalities similar to those in arterial thrombosis.[56] Though vascular lesions occasionally extend, they most commonly tend to recover and show accompanying improvement in the EEG. This recovery can be so rapid that focal changes are missed unless the EEG is taken quite early in the course of the illness.

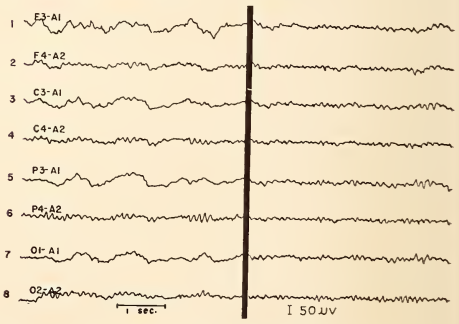


Fig. 11. Left centro-temporal intracerebral hematoma: 43 year old male had rapid onset headache, malaise, confusion and staggering gait two days before admission. There was marked confusion, aphasia, apraxia, 2 diopters of papilledema, right central facial weakness, hyperreflexia on the right side with an extensor plantar reflex. Skull films showed the pineal shifted to the right. Preoperative EEG (left half of strip) showed large delta focus maximal in the left inferior Sylvian region. Evacuation of large left temporal intracerebral hematoma was followed by nearly complete clinical recovery, reflected in EEG (right half of strip) 4 months later.

Head Injuries

Evaluation and prognosis of patients with head injuries are often clinically difficult. The physical factors involved in the injury may be obscured and symptoms and signs fluctuate widely. Brain damage is frequently diffuse even when focal neurological signs predominate. Experience with military and civilian head injuries in the past decade indicates that the EEG is a useful adjunct to the clinician, particularly if serial records are taken from the acute stage.[57 60] Such records have been found in many, but not all, to parallel the clinical courses with considerable accuracy. In the acute stage of injury there is marked slowing of frequencies with a predominance of medium and high voltage delta and theta activity either alone or mixed with normal frequencies. The disturbance is often diffuse but may be maximal at point of greatest injury (not infrequently *contre-coup*) or focal in penetrating wounds. The EEG may return to normal within a few minutes after simple concussion, but after cerebral contusion or laceration weeks or months may be required (fig. 12) for return of normal electrical activity. The usual order is for disappearance of slowest (delta) frequencies first, then of theta followed by gradual stabilizing of normal rhythms. Follow-up studies in chronic post-traumatic states[61 65] indicate that the time required for this process varies as widely as does the clinical course. Focal changes tend to persist longest, even many years, and correlate well with positive neurological findings. Positive correlations have also been found between severity and persistence of EEG abnormalities and duration of unconsciousness, of post-traumatic amnesia, positive neuropsychiatric past history and age. The greater abnormalities are to be found between incidence of EEG abnormalities and skull fractures or subjective complaints. A normal EEG in patients with complaints after head injury indicates either that there is no cerebral pathology or that the process has become static with irreversible changes. Particular interest has centered about the EEG in evaluating and predicting post-traumatic epilepsy. Epileptiform activity in the acute stage after head injury is considered to be of little prognostic significance,[58 60 66] but when it appears in the subacute and chronic stages the chances of the patient's developing clinical seizures are greatly increased. The incidence of convulsive seizures is higher in penetrating cerebral wounds than in closed head injuries. In the penetrating injuries the epileptogenic focus is most often near or at the wound site.[67]

Subdural hematomas produce no characteristic EEG changes[68 69] though homolateral suppression of alpha activity and low voltage of all frequencies have been reported. Focal delta and theta activity are not uncommon and may aid in lateralizing a unilateral hematoma. Bilateral hematomas present peculiar difficulties to the electroencephalographer.

Cerebral palsy due to prenatal or birth injury is difficult to evaluate with the EEG in the newborn and infants. After six months of age the presence of a "silent area" in the EEG may give first indication of cortical atrophy or developmental arrest.[70] In older children the spastic group, particularly those with seizures, show a higher incidence of EEG abnormalities than the athetoid.[71]

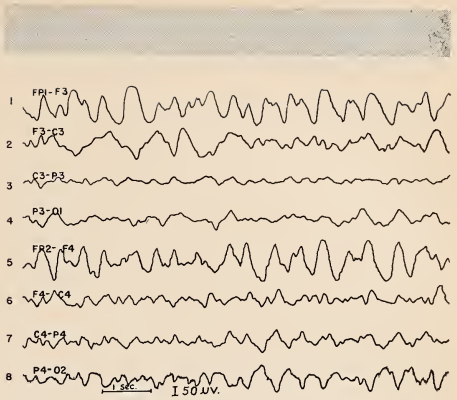


Fig. 12. Severe cerebral contusion and laceration: 21 year old female received head injury 2 weeks before admission. Semistuporous, left hemiparesis, hyperreflexia with bilateral extensor plantar reflexes. Cerebrospinal fluid was normal. EEG showed marked diffuse dysrhythmia.

Infections

The clinical course of infections involving the central nervous system is reflected in the EEG. As a rule, the greatest abnormalities are found in the acute stage and there is concurrent improvement in the subacute and chronic stages. In meningitis marked diffuse dysrhythmic changes occur in the acute stage[72] which subside with the infection. In infectious mononucleosis, similar EEG changes occur and the EEG may return to normal before the blood picture.[73]

Brain abscess[46 48 74] causes severe disorganization in the EEG similar to, though often more pronounced than, that seen in rapidly growing cerebral tumors. Continuous high voltage random slow waves are prominent in abscess development and their distribution may be diffuse, particularly in the initial phase before encapsulation has occurred. With progression of abscess encapsulation, focal EEG changes become more pronounced. Similarity between abscess and malignant tumor findings is not surprising in view of the marked local cerebral swelling seen in both.

Acute encephalitis following infections[75] and immunization procedures[76] causes diffuse EEG abnormalities. Random slowing predominates though epileptiform activity or near absence of electrical activity does occur. The changes are generally reversible (fig. 13) but may be permanent.[76] In the chronic post-encephalitic state, the appearance of epileptiform activity in the EEG may herald the onset of

clinical seizures.[75 76] Persistent or recurrent EEG abnormalities are requently associated with behavior problems in children after encephalitis. Similar changes in the EEG occur in polio-encephalomyelitis[77] and equine encephalitis.[78]

Degenerative Diseases

The EEG has contributed little to the understanding of degenerative diseases of the central nervous system. Many such patients with severe neurological deficits have normal EEGs, a fact which may be attributed in part to the chronicity and diffuseness of deeper underlying pathology. In neurological disorders where lesions other than cortical predominate (e.g., basal ganglia in hyperkinetic disorders, white matter in demyelinating diseases) the discrepancy between the EEG and clinical findings is greatest. Thus the EEG has been found to be normal in dystonia musculorum deformans, Wilson's disease, arteriosclerotic and postencephalitic Parkinsonism, Huntington's chorea, double athetosis, syringomyelia and syringobulbia and multiple sclerosis in remission.[79] In myoclonus (Unverricht's) epilepsy, random bilaterally synchronous spike and wave complexes, maximal over the central regions, occur in the interseizure EEGs and these are often accompanied by myclonic jerks. Slow (delta and theta) frequencies and multiple spikes are common.[79 80] Acute and subacute lesions in multiple sclerosis produce a variety of EEG changes which correlate well with acuity but not location of the lesions.[81] In tuberous sclerosis the EEG may be normal. Diffuse dysrhythmias proportional to the severity of the chorea are seen in Sydenham's chorea.[82]

The EEG in Psychiatry

Early hopes that the EEG would yield insight into the mechanisms of psychiatric phenomena have been only partially realized. As Hill[83] has pointed out, the difficulty lies in attempting to translate subjective experiences into objective terms. The electrical events accompanying thought processes indicate the presence of, and to some extent, the degree of neuronal activity but not the nature of the information conveyed by these signals. In normal individuals there is no correlation between the EEG and intelligence and the EEG is usually normal in the wide variations in personalities, in stutterers and in most psychoneuroses. Abnormal EEGs not correlated with mood changes are seen in many manic depressive psychotics.[84] A higher incidence of EEG abnormalities is seen in schizophrenics, particularly catatonics,[85] psychopaths[86 87] and behavior problems in children[88 89] Except for those individuals who show epileptiform activity, the EEG does not serve as a guide to therapy in the psychotic states. Whether the abnormalities reflect an "inborn constitutional abnormality of the central nervous system"[90] or failure of the nervous system to achieve normal integration[91] is not known, but their presence warns against oversimplification of approach to "functional" disorders.

Diseases involving the central nervous system may cause changes in affect which range from the most subtle to the psychotic. Confusional states of diverse etiology have been found to result in EEG changes proportional to the impairment of consciousness[29 30] which reverse as the delirium clears. In neurosyphilis, EEG abnormalities are predominantly diffuse and are related more to severity of intellectual deterioration than to clinical type. The EEG after antiluetic therapy correlates better with neurological than serological improvement.[92 93] Patients with arteriosclerotic and senile dementia may show little or diffuse dysrhythmia[94] (fig. 14).

Though distinctions are by no means absolute, the principal usefulness of the EEG to the psychiatrist is in aiding in differentiation of "functional" disorders from those due to detectable cerebral pathology. Those patients with abnormal records, especially with focal abnormalities, should be regarded with more than ordinary caution before they are relegated solely to psychiatric treatment.

Summary

Clinical electroencephalography, the recording and interpretation of human brain waves, has come into widespread use in the past fifteen years. Disorders affecting the central nervous system may produce abnormalities in the electroencephalogram which can be of diagnostic and prognostic aid to the clinician. The procedure is painless, without risk and can be done without hospitalization. Of greatest usefulness in convulsive disorders, the EEG is also useful in study of organic cerebral lesions and evaluation of head injuries and psychiatric disorders. Since the EEG does not yield pathognomonic information, it is to be regarded as an aid to, rather than a substitute for, clinical acumen.

Acknowledgement: I wish to record my gratitude to Miss J. H. Gartrell for technical assistance and aid in preparation

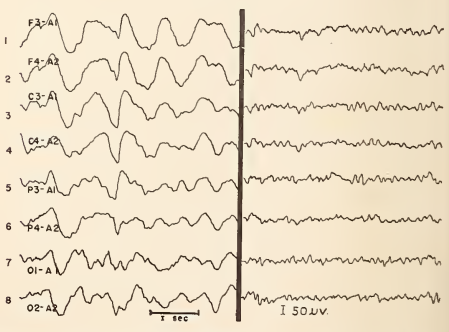


Fig. 13. Post-infectious encephalitis: 5 year old girl developed a mild respiratory infection 18 days before admission; 8 days later fever, headache, nosebleed, confusion and apathy. No positive physical findings except apathy. Cerebrospinal fluid was normal except for mild lymphocytic pleocytosis. EEG showed a marked diffuse dysrhythmia (left half of the strip) but was normal 3 weeks later (right half of strip) after marked clinical improvement.

of illustrations, and to Miss Kathleen Mackay and Mr. J. T. Jackson of the Department of Medical Illustration for figures and photographs.

BIBLIOGRAPHY

1. Caton, Richard: The electric currents of the brain, Brit. M. J., 2:278, 1875.
2. Prawdicz-Neminski, W.: Zur Kenntnis der elektrischen und der Innervations vorgange in den funktionellen Elementen und Geweben des tierschen organismus. Elektrocerebrogramm der Saugietiere, Pfluger's Arch. f. d. ges. Physiol., 209:362-382, 1925.
3. Berger, H.: Uber das Elektrencephalogramm des Menschen, Arch. f. Psychiat., 81:527-570, 1929.
4. Adrian, E. D.: Electrical activity of the nervous system, Arch. Neurol. & Psychiat., 32:1125-1136, 1934.
5. Adrian, E. D., and Matthews, B. H. C.: The interpretation of potential waves in the cortex, J. Physiol., 81: 440-471, 1934.
6. Adrian, E. D., and Matthews, B. H. C.: The Berger rhythm: potential changes from the occipital lobes in man, Brain, 57: 355-385, 1934.
7. Gibbs, F. A., Davis, H., and Lennox, W. G.: The electroencephalogram in epilepsy and in conditions of impaired consciousness, Arch. Neurol. & Psychiat. 34: 1133-1148, 1935.
8. Walter, W. G.: The location of cerebral tumors by electro-encephalography, Lancet, 2:305-308, 1936.
9. Bagchi, B. K., and Bassett, R. C.: Some additional electroencephalograph techniques for the localization of intracranial lesions, J. Neurosurg., 4:348-369, 1947.
10. Kaufman, I. C., and Watson, C. W.: A brief review of methods used to elicit or accentuate abnormalities in the electroencephalogram, EEG. Clin. Neurophysiol., 1:237-240, 1949.
11. Gibbs, E. L., and Gibbs, F. A.: Diagnostic and localizing studies in sleep, Proc. Assn. Research Nerv. & Ment. Dis., 26:366-376, 1946.
12. Gibbs, F. A., and Gibbs, E. L.: Routine Seconal sedation: a major aid to clinical electroencephalography, EEG. Clin. Neurophysiol., 1:245, 1949.
13. Gasteaut, H.: Combined photic and metrazol activation of the brain, EEG. Clin. Neurophysiol., 2:249-261, 1950.
14. Gasteaut, H., and Hunter, J.: An experimental study of the mechanism of photic activation in idiopathic epilepsy, EEG. Clin. Neurophysiol., 2:263-287, 1950.
15. Gibbs, F. A., and Gibbs, E. L.: Atlas of Electroencephalography. I. Methodology and Controls, ed. 2, Cambridge, Mass., Addison-Wesley Press, Inc., 1950.
16. Walter, W. G.; Hill, D.; Cobb, W. A.; Witteridge, G. D. G., and Hepenstall, M. E.: Electroencephalography: a symposium on its various aspects, ed. by Denis Hill and Geoffrey Parr, New York, Macmillan, 1950.
17. Jasper, H. H.: Electroencephalography. Penfield, W., and Erickson, T.: Epilepsy and cerebral localization, Springfield, Ill., Charles C. Thomas, 1941, pp. 380-454.
18. Grass, A. M., and Gibbs, F. A.: A Fourier transform of the electroencephalogram, J. Neurophysiol., 1:521-526, 1938.
19. Dawson, G. D., and Walter, W. G.: The scope and limitations of visual and automatic analysis of the electroencephalogram, J. Neurol., Neurosurg. & Psychiat., 7:119-133, 1944.
20. Smith, J. R.: The electroencephalogram during normal infancy and childhood, I-III, J. genet. Psychol., 53: 431-482, 1939.
21. Smith, J. R.: The frequency growth of the human alpha rhythms during normal infancy and childhood, J. Psychol. 11:177-198, 1941.
22. Lindsley, D. B.: A longitudinal study of the occipital alpha rhythm in normal children: frequency and amplitude standards, J. genet. Psychol., 55:197-213, 1939.
23. Jasper, H., and Penfield, W.: Electrocorticograms in man: Effect of voluntary movement upon the electrical activity of the precentral gyrus, Arch. f. Psychiat. u. Zeitschrift Neurol., 183:163-174, 1949.
24. Davis, P. A.; Davis, H., and Thompson, J. W.: Progressive changes in the human electroencephalogram under low oxygen tension, Am. J. Physiol., 123:51-52, 1938.
25. Heppenstall, M. E.: The relation between the effects of the blood sugar levels and hyperventilation on the electroencephalogram, J. Neurol. Neurosurg. & Psychat., 7:112-118, 1944.
26. Gibbs, F. A.: Gibbs, E. L., and Lennox, W. G.: Electroencephalographic response to hyperventilation and its relation to age, J. Pediat., 23:497-505, 1943.
27. Blier, J. S., and Redlich, F. C.: Electro-encephalogram in the pitressin hydration test for epilepsy, Arch. Neurol. & Psychiat., 57:211-219, 1947.
28. Ross, D. A., and Schwab, R. S.: The cortical alpha rhythm in thyroid disorders, Endocrinology, 25:75-79, 1939.
29. Romano, J., and Engel, G. L.: Delirium. I. Electroencephalographic data, Arch. Neurol. & Psychiat. 51:356-377, 1944.
30. Engel, G. L., and Romano, J.: Delirium. II. Reversibility of the electroencephalogram with experimental procedures, Arch. Neuro. & Psychiat., 51:378-392, 1944.
31. Hoffman, W. C.; Lewis, R. A., and Thorn, G. W.: The electroencephalogram in Addison's disease, Johns Hopkins Hosp. Bull.: 70:335-361, 1942.
32. Thorn, George W. et al.,: Clinical and metabolic changes in Addison's Disease following the administration of Compound E acetate (11-dehydro, 17-hydroxycorticosterone acetate): Tr. A. Am. Physicians, 1949.
33. Andrews, H. L.: Cortical effects of Demerol, J. Pharmacol. & Exper. Therap.: 76:89-94, 1942.
34. Brazier, M. A. B., and Finesinger, J. E.: The action of barbiturates on the cerebral cortex. Electroencephalographic studies, Arch. Neurol. & Psychiat.: 53:51-58, 1945.
35. Gibbs, F. A.; Gibbs, E. L., and Lennox, W. G.: Epilepsy: a paroxysmal cerebral dysrhythmia, Brain 60:377-378, 1937.
36. Walter, W. G.; Hill, D., and Williams, D.: Discussion on the electro-encephalogram in organic cerebral disease, Proc. Roy. Soc. Med. 41:237-250, 1948.
37. Jasper, H., and Kershman, J.: EEG classification of the epilepsies, Arch. Neurol. & Psychiat. 45:903-943, 1941.
38. Gibbs, F. A.; Gibbs, E. L., and Lennox, W. G.: Electroencephalographic classification of epileptic patients and control subject, Arch. Neurol. & Psychiat. 50:111-128, 1943.
39. Jasper, H., and Kershman, J.: Classification of the EEG

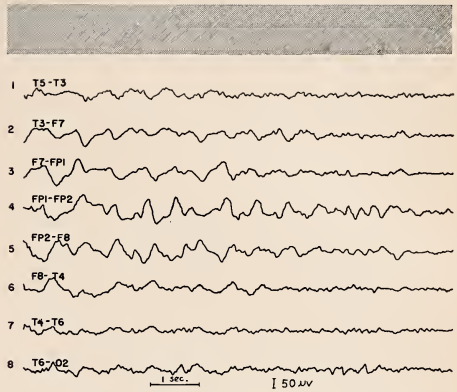


Fig. 14. Diffuse cerebral atrophy: 62 year old female with major seizures for 22 years. Six months before admission developed gait disturbance and mental deterioration which progressed rapidly to complete invalidism. On admission she was disoriented, restless and incontinent. Skull films were normal. EEG showed marked diffuse dysrhythmia maximal over the frontal regions. Ventriculogram showed extreme atrophy of brain, brain stem and cerebellum.



in epilepsy, EEG Clin. Neurophysiol., supp. 2, Proc. 2nd Internat. Cong. of EEG, Paris, 1949, pp. 123-136.

40. Gibbs, E. L.; Merritt, H. H., and Gibbs, F. L.: Electroencephalic foci associated with epilepsy, Arch. Neurol. & Psychiat. 49:793-801, 1943.

41. Kershman, J.; Vasquez, J., and Goldstein, S.: The incidence of focal and non-focal EEG abnormalities in clinical epilepsy, EEG Clin. Neurophysiol 3:15-24, 1951.

42. Little, S. C., and Sutton, M.D.: The value of electroencephalography in diagnosis of brain tumors, New Orleans M. & S. J. 102:627-636, 1950.

43. Williams, D.: The abnormal cortical potentials associated with high intracranial pressure, Brain 62:321-334, 1939.

44. Greenstein, L., and Strauss, H.: Correlations between the electroencephalogram and the histological structure of gliogenous and metastatic brain tumors, J. Mt. Sinai Hosp. 12:874-877, 1945.

45. Kershman, J.; Conde, A., and Gibson, Wm. C.: Electroencephalography in differential diagnosis of supratentorial tumors, Arch. Neurol. & Psychiat. 62:255-268, 1949.

46. Yeager, C. L., and Luse, S.: Electroencephalographic localization and differentiation of lesions of the frontal lobes, Arch. Neurol. & Psychiat. 54:197-201, 1945.

47. Hoefer, P. F. A.; Schlesinger, E. B., and Pennes, H. H.: Clinical and electroencephalographic findings in a large series of cases of verified cerebral tumors, Tr. Am. Neurol. A. 71:52-57, 1946.

48. Cobb, W. A.: The electro-encephalographic localization of intra-cranial neoplasms, J. Neurol. Neurosurg. & Psychiat. 7:96-102, 1944.

49. Bagchi, B. K., U. of Mich., personal communication to author.

50. Walter W, G., and Dovey, J. J.: Electro-encephalography in cases of sub-cortical tumors, J. Neurol. Neurosurg. & Psychiat. 7:57-65, 1944.

51. Rheinberger, M. B., and Davidoff, L. M.: Posterior fossa tumors and the electroencephalogram, J. Mt. Sinai Hosp. 9: 734-754, 1942.

52. Cuneo, H. M.; Rand, C. W., and Sjaardema, H.: Analysis of electroencephalographic findings in forty cases of verified brain tumor. I-V, Bull. Los Angeles Neurol. Soc. 14: 1-22, 86-103, 149-162, 200-226, 1949; 15:22-36, 1950.

53. Jones, E. V., Jr.; and Bagchi, B. K.: Electroencephalographic findings in verified thrombosis of major cerebral arteries (14 cases), Univ. Mich. Med. Bull. 17:295-310, 1951.

54. Greenstein, L., and Strauss, H.: The electroencephalogram in subarachnoid hemorrhage, J. Mt. Sinai Hosp. 13: 77-82, 1946.

55. Woodhall, B., and Lowenbach, H.: Congenital cerebral aneurysms lateralized by electroencephalography, South M. J. 36:580-587, 1943.

56. Swanson, H. S., and Gish, G. R.: Spontaneous thrombosis of Rolandic vein: a report of two cases—angiographic verification, to be published.

57. Jasper, H. H.; Kershman, J., and Elvidge, A.: Electroencephalographic studies of injuries to the head, Arch. Neurol. & Psychiat. 44: 328-350, 1940.

58. Williams, D.: The electro-encephalogram in acute head injuries, J. Neurol. Neurosurg. & Psychiat. 4:107-130, 1941.

59. Dow, R. S.: Ulett, G., and Raaf, J.: Electroencephalographic studies in head injuries, J. Neurosurg. 2: 154-169, 1945.

60. Roseman, E.: Electroencephalography as a prognostic aid in severe head injury, J. Nerv. & Ment. Dis. 105:319-321, 1947.

61. Glaser, M. A., and Sjaardema, H.: The value of the electroencephalogram in craniocerebral injuries, West. J. Surg. 48:689-696, 1940.

62. Williams, D.: The electro-encephalogram in chronic post-traumatic states, J. Neurol. Nerosurg. & Psychiat. 4:131-146, 1941.

63. Hepenstall, M. E., and Hill, D.: Electroencephalography in chronic post-traumatic syndromes, Lancet 1:261-263, 1943.

64. Laufer, M. W., and Perkins, R. F.: Serial electroencephalograms in brain injury, J. Nerv. & Ment. Dis. 106: 619-630, 1947.

65. Clark, E. C., and Harper, E. O.: Electroencephalographic findings in 186 cases of chronic post-traumatic encephalopathy, EEG Clin. Neurophysiol. 3:9-14, 1951.

66. Williams, D.: The electroencephalogram in traumatic epilepsy, J. Neurol., Neurosurg. & Psychiat. 7:103-111, 1944.

67. Walker, A. E.; Marshall, C., and Beresford, E. N.: Electrocorticographic characteristics of the cerebrum in posttraumatic epilepsy, Fr. Assoc. Research Nerv. & Ment. Dis. 26:502-515, 1947.

68. Friedlander, W. J.: The electroencephalographic findings in 39 surgically proven subdural hematoma, EEG Clin. Neurophysiol. 3:59-62, 1951.

69. Sullivan, J. F.; Abbott, J. A., and Schwab, R. S.: The electroencephalogram in cases of subdural hematoma and hydroma, EEG Clin. Neurophysiol. 3:131-139, 1951.

70. Walter, W. G.: Electroencephalography: a symposium on its various aspects, ed. by Denis Hill and Geoffrey Parr, New York, Macmillan, 1950, p. 217.

71. Perlstein, M. A.; Gibbs, E. L., and Gibbs, F. A.: The electroencephalogram in infantile cerebral palsy, Tr. Assoc. Research Nerv. & Ment. Dis. 26:377-384, 1947.

72. Engel, G. L.: The clinical applications of electroencephalography, Cincinnati J. Med. 27:151-181, 1946.

73. Bercel, N. The electro-encephalogram in cerebral complications of infectious mononucleosis, J. Nerv. & Ment. Dis. 107:537-544, 1948.

74. Pučech, M. P. and Lerique-Koechlin: L'electro-encephalographic dans les abces du cerveau, Rev. Neurol., 76;303-305, 1944.

75. Gibbs, F. A., and Gibbs, E. L.: The electroencephalogram in encephalitis, Arch. Neurol. & Psychiat. 58: 184-192, 1947.

76. Bickers, D. S.: Postvaccinal encephalitis with pre-existing focal cerebral seizures: report of a case. To be published.

77. Goldbloom, A.; Jasper, H. H., and Brickman, H. F.: Electroencephalographic changes in poliomyelitis, J.A.M.A. 137:690-697, 1948.

78. Lindsley, D. B., and Cutts, K. K.: Clinical and EEG changes in a child recovering from encephalitis, Arch. Neurol. & Psychiat. 45:151-161, 1941.

79. Rheinberger, M. B.; Bickers, D. S., and Cohn, G. A.: Unpublished data.

80. Grinker, R. R.; Serota, H., and Stein, S. I.: Myclonic epilepsy, Arch. Neurol. & Psychiat. 40:968-980, 1938.

81. Jasper, H. H.; Bickford, R., and Magnus, O.: The electroencephalogram in multiple sclerosis, Tr. Assoc. Research Nerv. & Ment. Dis. 28:421-427, 1950.

82. Usher, S. J., and Jasper, H. H.: The etiology of Sydenham's chorea: electroencephalographic studies, Canad. M. A. J. 44:365-371, 1941.

83. Hill, D.: Electroencephalography: a symposium on its various aspects, ed. by Denis Hill and Geoffrey Parr, New York, Macmillan, 1950, p. 319.

84. Davis, P. A.: Electroencephalograms of manic-depressive patients, Am. J. Psychiat. 98:430-433, 1941.

85. Finley, K. H., and Campbell, C. M.: Electroencephalography in schizophrenia, Am. J. Psychiat. 98:374-381, 1941.

86. Hill, D., and Watterson, D.: Electroencephalographic studies of psychopathic personalities, J. Neurol. & Psychiat. 5:47-65, 1942.

87. Hill, D.: Cerebral dysrhythmia: Its significance in aggressive behaviour, Proc. Roy. Soc. Med. 37:317-330, 1944.

88. Jasper, H. H.; Solomon, P., and Bradley, C.: Electroencephalographic analyses of behavior problem children, Am. J. Psychiat. 95:641-658, 1938.

89. Lindsley, D. B., and Cutts, K. K.: Electroencephalograms of "constitutionally inferior" and behavior problem children, Arch. Neurol. & Psychiat. 44:1199-1212, 1940.

90. Williams, D.: The significance of an abnormal electroencephalogram, J. Neurol. & Psychiat. 4:257-268, 1941.

91. Hill, D.: Electroencephalography: a symposium on its various aspects, ed. by Denis Hill and Geoffrey Parr, New York, Macmillan, 1950, P. 363.

92. Finley, K. H.; Rose, A. H., and Solomon, H. C.: Electroencephalographic studies in neurosyphilis, Arch. Neurol. & Psychiat. 47:718-736, 1942.

93. Greenblatt, M. and Rose, A. S.: Electroencephalographic studies during fever induced by typhoid vaccine and malaria in patients with neurosyphilis, Am. J. M. Sc. 207: 512-519, 1944.

94. Liberson, W. T., and Seguin, C. A.: Brain waves and clinical features in arteriosclerotic and senile mental patients, Psychosom. Med. 7:30-35, 1945.

Special Articles

CASUALTY HANDLING

in Emergencies

CHARLES E. DOWMAN, M.D., Atlanta

The handling of casualties in emergencies, particularly when large numbers of injured are produced in a short time, has always taxed the medical facilities wherever such situations occurred. In Georgia, the Gainesville hurricane and the Winecoff fire stand out particularly. All of us realize the importance of planning so that such lessons as were learned can be carried over into future planning.

Frankly, the present paper is written in order that the physicians of Georgia may have a concise, sound guide to the care of the injured, particularly in event of a sneak atomic, high-explosive or incendiary bombing. It also can serve as a reference in event of any major casualty-producing calamity, and is directed to cover the efforts of the first seventy-two hours; the initial treatment rather than the reparative and reconstructive efforts.[2]

The State plan at present is based on realistic and sobering facts. We have in Georgia, even wtih the new construction, 8000 hospital beds. In May, 1945, the most active fighting month of World War II the casualties numbered about 60,000. We must plan for this many casualties occurring in a few minutes and be ready to do our best. It is obvious we must prepare medical facilities other than our existing hospitals. The schools, being distributed geographically according to population, furnish obvious auxiliary sites. The grammar schools are to be used to funnel through the main mass of casualties, referred to in this paper as "provisional hospitals". In addition, there is need for early surgery to save life in certain cases. To take care of this group, the high schools fill the need for the "priority hospitals." This installation will serve its purpose best if the personnel can devote their time to thorough care of small numbers of the most severely wounded casualties, the priority and non-transportable group. Here we will need some form of emergency power for suction, lights and refrigeration as well as steam sterilizers.

In large cities with a single atomic bomb explosion, we may expect at least 80,000 casualties needing treatment. In smaller towns with ordinary "blockbusters" as many as one hundred injured may be produced, this being the number injured in the Winecoff fire. For the true "Country Doctor" (and there are still some left) the chance to apply care to mass casualties in his practice should not be overlooked. He may only have an increase in the number of women and children in his neighborhood due to mass evacuation before a bombing or for feeding and care after their homes are destroyed. Each of us then has his place.

The first mass handling of casualties in the age of antibiotics took place during World War II[1 2] This problem differs from ordinary surgical care in that the surgeon may have control of the patient for only a short time after debridement. Responsibility for care rests on so many individuals, and primarily sutured wounds under these conditions are dangerous.[2]

I. TRIAGE. The sorting of wounded is a continuous process which must be under the direct supervision of physicians. A level head is needed to decide where this particular man's problem can best be handled, considering what is available to work with and how many others are hurt. A single injured

person taken to an otherwise quiet hospital can receive the undivided attention of several people. Let twenty arrive at once and the problem is one of deciding who most needs immediate help and who can wait. A hundred injured, (or 80,000 as we may expect with a single sizable atomic bomb exploded in the daytime over downtown Atlanta without warning) increases the problem considerably. The value of planning beforehand then becomes more obvious. Certain primary grouping of injured can be expected and plans made to handle them.

A. PRIORITY AND NON-TRANSPORTABLES. Most of this relatively small group of patients, with abdominal, chest and major blood vessel injury will require early thorough major surgery. In the provisional hospital, where first contact with the doctor is made, these must be recognized rapidly, given whatever supportive treatment is available (not too extensively so that valuable time for the patient is wasted) and transferred either to the nearest priority or regularly functioning hospital. The high school priority hospital, set up for three or more surgical and one or more shock teams, would be ideal. This is particularly true if we do not clutter up these institutions with all sorts of wounded. Here also is the best place to use whatever blood we have available early if we want it for the saving of lives.[5]

B. MODERATELY WOUNDED. About a fifth of the total casualties will probably fall into this group. These patients will have broken bones, fair sized lacerations, moderately severe burns and brain and spinal cord wounds. All such patients require surgery at some time, preferably within the first 24-48 hours after injury. Many of them can be evacuated by air, ambulance, truck or train, provided they can be given antibiotics and morphine or its relatives. How many of these will be moved will depend to a certain extent on transportation facilities. With adequate transportation available, it is better to evacuate these before, rather than after, operation. For this group, the provisional hospital will be interested primarily in applying or adjusting dressings, giving plasma or fluids for shock when such are available, opiates and sedatives for comfort, antibiotics, and evacuation to the periphery of the city as rapidly as transportation is available. In the case of the town of a few thousand, as many as a hundred injured will certainly overtax the facilities of the local hospital and dependence on a group of neighboring towns will doubtless be necessary.

C. LIGHTLY WOUNDED. Many of the casualties with minor wounds such as small glass cuts, bruises, superficial burns, will have to be used as fire fighters, rubble removers, rescue squads, local police, etc. It is here that the provisional hospital used as a casualty collection point will have a major job of treatment. This group will probably total 60 per cent or more of all casualties and contain the very valuable manpower pool which should be treated very thoroughly and carefully. The loss of an arm from infection can be as crippling (or more so) as having the arm blown off. Careful debridement of these wounds, chemotherapy and adequate dressing done early will reduce morbidity.

II. SHOCK. This is best treated with blood and fluid replacement, although posture also helps.[5,9] External heat has been found to be of little value in such situations, aggravating shock by producing vasodilatation which in turn requires more total circulating fluids. All patients needing blood will probably not be able to be given it early and it should be remembered that plasma does save lives even though it does not increase oxygen carrying capacity sufficiently to make operation safe. Hence plasma will have to be used mainly to treat that group of moderately wounded individuals in fairly severe shock as they are seen at the provisional hospitals. It will also have a definite place in the treatment of burns, particularly in that group which shows shock from loss of body fluids.

III. DEBRIDEMENT. This means a thorough exploration and removal of damaged tissues and in-driven foreign matter from a wound.

A. THE SKIN. The skin shows an amazing viability, hence it is of no help to circumcize the wound. It is much more valuable to enlarge the entry wound along normal skin cleavage lines in order to obtain adequate exposure without sacrifice of skin. Counter incisions are necessary at times to remove readily available foreign bodies. (See Figure 1 for a diagram of normal skin cleavage lines). On the face and hand in particular no tissue should be excised unless it is obviously dead.

B. THE DEEPER STRUCTURES. The deep fascia should be opened liberally along slightly curvilinear extensions, parallel to the extremities. Cruciate incisions should be avoided. In-driven hair, dirt, clothing as well as damaged tissue must be removed. The muscles should not be transected. Bleeding points should be stopped by whatever method is available, probably by ligation with fine catgut or ordinary household thread. Tendons, if cut, do better with early approximation, but if the tendon is bridging a wide wound then one can tag either end with a fine silk suture or black cotton suture for future reference, particularly where many wounded must be handled early and lengthy procedures must be postponed. Wire sutures are quite handy for this purpose, but may not be available. Lacerated nerves do not require suturing at this stage, and as a matter of fact do better if definitive treatment is postponed until such time as a healed wound has been obtained within a period of a few weeks. A single through and through suture early will prevent retraction of nerve ends. Fractures are best treated early by some method of external fixation rather than by insertion

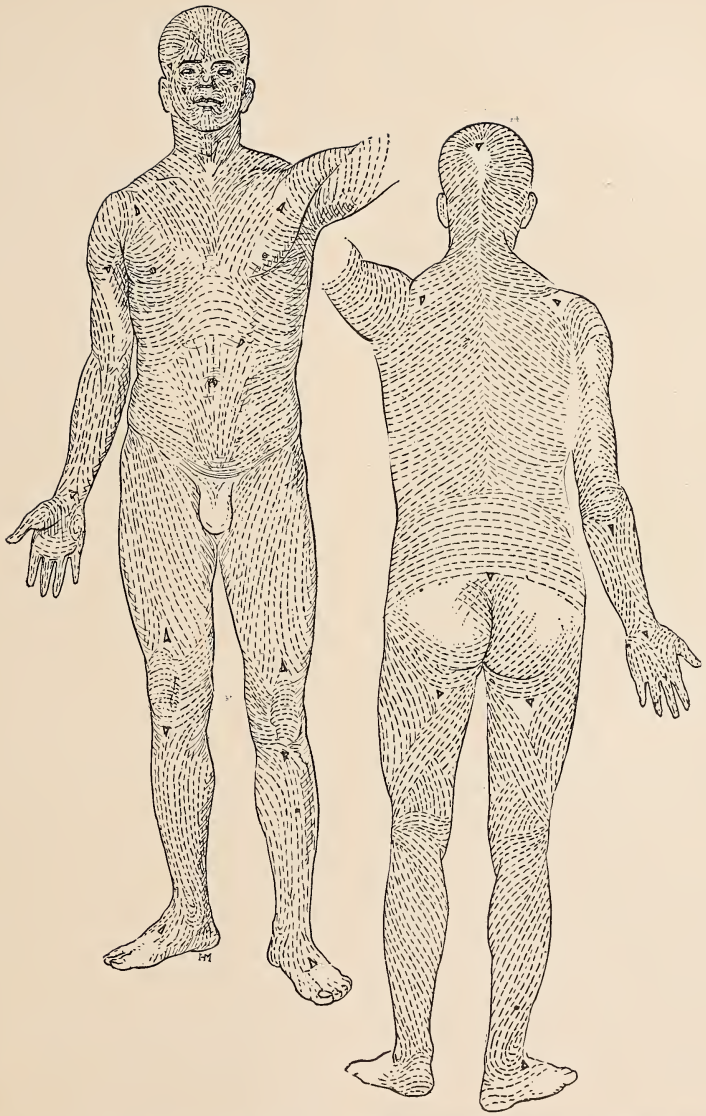


Fig. 1. INCISION LINES OF THE ENTIRE BODY. These figures represent the lines of cleavage and also the chief directions of subcutaneous connective tissue, blood vessels and nerves. As a general rule, the incisions may be made along these lines down to the deeper structures with the least danger of severing important structures. (Taken from Manual of Surgical Anatomy Medical Dept. U. S. Army and Navy, 1918. Originally from Toldt's Anatomy.)

of foreign bodies into the wounds. This is also true in saving of time, simple plaster casts for rest of fractures during transportation being applied fairly rapidly without too much concern over meticulous reduction. Opened joints should be closed after irrigation and debridement, this group usually needing the type of help available for the moderately wounded rather than being handled in the provisional hospitals.

C. CLOSURE. It is in this matter that much of the avoidance of trouble was accomplished in World War II. The surgeon who debrides these mass emergency wounds usually will not have control of the patient for any predictable period of time. Hence it is unwise to close the usual flesh wound of the body or the extremity.[2] Sucking chest wounds obviously will require closure as will abdominal wounds. Head wounds will also require closure but this should not be done over undebrided deep damage, and such patients can best be handled in regular hospitals by the specially trained. In spite of due care, small devitalized bits of bone, muscle or fascia, or hair or clothing may remain behind to act as setons about which infection gathers. This can work its way out of the open wound or can be removed at the time of first dressing. Fine mesh gauze, either plain or impregnated with vaseline, is handy to lay into the edges of such a wound. No tight packing should be done but the wound should have an initial layer of fine mesh gauze as described, a fair sized overlying dressing and a snug but not tight dressing atop this, helping to give support to the wound. Plaster helps on some larger extremity wounds. After some 5-10 days these wounds can be dressed aseptically in the operating room. If no infection is present and the patient is to remain under one person's control, secondary closure can readily be accomplished (Churchill's "Reparative" phase[2]).

IV. BURNS. The cellulose-filled gauze-covered compress is to be available in sufficient quantities to be used for primary dressing of burns. Many of these dressings will have already been applied at the neighborhood aid station before the provisional hospital is reached, and for these patients the primary duty on arrival there will be to make sure that circulation of an extremity is not being cut off by the bandage holding such compresses in place. Here again, general chemotherapy is of considerable importance and should be given to each patient so long as he is in the provisional hospital. Adequate fluids should also be given here, and plasma and saline can be given when available. The idea of giving such patients hypotonic saline and soda by mouth is a good one, but if they are vomiting, their chloride loss will only be increased. These patients, too, with their multitudinous problems of wound cleanliness, need for grafting and transfusions, form an ideal group to eliminate from the immediate vicinity of the bombing or other major catastrophe. For morale purposes, it is as well to have such patients concentrated in fair-sized groups in order that they may help each other and learn that others may be much worse off.

V. PRIORITY AND NON-TRANSPORTABLE SURGICAL CARE. Patients who arrive at the provisional hospital with tourniquets in place must have these loosened, and if there be bleeding the patient should be sent to a priority hospital. Those with sucking chest and abdominal wounds should be given nothing by mouth and should likewise be sent early to priority hospitals. Many such patients may have to receive shock therapy in the provisional hospital even before they can be removed to the priority hospital, though if the move is a short one it is better for the patient to be sidetracked into a place where he can have undivided attention of those whose sole job it is to take care of this seriously wounded group.[2] In World War II the Fifth and Seventh Army installations which took care of this group of patients only, had mortality figures in the realm of 25 per cent. Such patients required large amounts of blood (an average of 5-7 pints), careful treatment of shock and extremely skillful surgery. That three out of four were saved was due to the fact that skilled surgeons could give their undivided attention to small groups of seriously wounded. These patients totalled usually not more than fifty for a field hospital platoon with three general surgical teams in a 24 hour period. Obviously, in that instance, the rate of casualty production was low over a long period of time, in contradistinction to the high casualty rate in a brief time that will occur in the bombing of large cities.

A. MAJOR ARTERY WOUNDS. Major artery wounds will have to be explored and vessels ligated or sutured. In many of these sympathetic blocks and sympathectomies will also be needed.[4] Generally speaking, the fate of the extremity has not been affected by the use of a tourniquet,[10] and unless the tear in the vessel is a small one, ligation of the vessel is wisest.

B. ABDOMINAL WOUNDS. These will have to be explored and damaged solid viscera patched to control bleeding and hollow viscera either repaired or resected. The spleen is readily removable. Liver, pancreas and the kidney prove to be fairly viable, and bleeding can be controlled either by simple suturing or fibrin, gelatin foam or oxidized cellulose. Kidneys which are widely pulped or have major vessel damages will of course have to be removed. Such kidney wounds will not be discovered unless "retroperitoneal hematomas" are thoroughly explored. Wounds of the stomach require a layer closure, the mucosa in particular being closed separately.[6] The smaller perforations of the small intestine can be sutured usually across the intestine rather than along it to prevent narrowing of the lumen. The ascending colon wounds are the most dangerous and difficult cases to handle, more deaths from peritonitis occurring in this group than in any other colon wounds in World War II. Ideally with the larger wounds, resection of the entire right colon should be done with ileo-transverse colostomy and draining of the proximal stump of the transverse colon or a spur ileocolostomy. Smaller ascending colon wounds can be sutured and exteriorized tangentially, or handled like

a tube colostomy. Most of the remaining abdominal colon wounds can be exteriorized and handled as a Mikulicz procedure or a variant of this. The lower sigmoid and upper rectal wounds below the peritoneal reflection can not be exteriorized but should be investigated by reflecting the peritoneum if any possibility of wounding is suspected. In these a diversional colostomy is mandatory and the retroperitoneal spaces must be drained. Bladder wounds should be closed and the bladder and space of Retzius drained. Local chemotherapy offers no additional help in prevention of peritonitis over that provided by parenteral chemotherapy.[7]

C. PENETRATING CHEST WOUNDS. These wounds, particularly sucking chest wounds, may require early surgical efforts. Those with massive hemorrhage may require exploration and ligation of intercostal arteries even though there is no open wound. Those patients with simple hemothorax without abdominal wounds can have the blood saved from thoracentesis and given intravenously in the first 24 hours with safety. Thoracotomy is needed mainly for large chest wall defects, for severe continuing hemorrhage into the pleura, possible damage to the esophagus, a large bronchial fistula or a large foreign body. The smaller chest wounds can be simply debrided and closed without extensive exploration and the fluid blood aspirated from the pleura.[8]

D. THORACO-ABDOMINAL WOUNDS. The possibility of lower chest missiles entering the upper abdomen should never be forgotten. The left upper abdomen can be explored thoroughly through the chest. Any wound on the right may enter and tear the liver, and if so, unless the diaphragm is repaired a biliary thoracic fistula will occur. As in abdominal wounds, the liver tear must be repaired or packed and external drainage must be afforded. Such external drainage and diaphragmatic repair must also be done in kidney and pancreas wounds. The chest can be washed out thoroughly at the time the wound is explored and diaphragm sutured on either side, reducing the risk of chemical or bacterial empyema. Stomach and small bowel wounds must be repaired or resected and exteriorization of large bowel wounds may have to be done through separate incisions. The lung can be sutured at the time of thoracic exposure.[3]

E. ANESTHESIA. In this priority group, with patients in shock, with chest openings that require positive pressure anesthesia, and where endotracheal tubes frequently mean the difference between life and death, good anesthetic help is mandatory. Suction is urgently need, and although make-shifts have been used, the small portable electric suction machine is immensely more efficient. Power for this and for light can be furnished with ease by the use of the small-to-medium gasoline driven portable electric generators as furnished to the field hospital platoons of the Army in World War II. For this group the most satisfactory anesthetic agent is gas-oxygen-ether with endotracheal tube in place and carbon dioxide absorption in a closed system. Pentothal and spinal anesthesia in this group are quite dangerous.

SUMMARY

SUMMARY. 1. TRIAGE consists of the sorting and directing of casualties, such care of the wounded being a continuous process from the aid station to final return to civilian life.

2. PRIORITY AND NON-TRANSPORTABLE CASUALTIES consisting particularly of penetrating chest, abdominal and major vascular wounds, are best handled in priority hospitals set up in high schools away from the major casualty flow and where operating facilities should be available for at least three teams to work simultaneously.

3. THE MODERATELY WOUNDED will require dressings at provisional hospitals, treatment of shock with plasma or fluids, readjustment of bandages and evacuation from the center to the periphery, probably by air, ambulance or train to nearby towns.

4. THE LIGHTLY WOUNDED will need local handling, careful debridement, chemotherapy and out-patient care. They will have to assist in the local efforts at fire fighting, rescue, etc.

5. DEBRIDEMENT consists in skin incision along normal cleavage planes, the liberal opening of deep fascia and muscle splitting, the removal of damaged tissues and indriven foreign bodies, leaving the wounds open and bandaging them. Closure of such wounds can be accomplished later. Hemostasis is best accomplished with fine catgut ligatures.

6. BURNS will be dressed initially by first-aid personnel and their dressings will have to be adjusted at temporary hospitals, their pain relieved, and antibiotics given and their shock treated before evacuation.

7. SHOCK is best treated by rest, Trendelenburg position, plasma and blood if available. Oral fluids can be given in the absence of chest and abdominal penetrations.

REFERENCES

1. Beecher, H. K.: Early care of the seriously wounded man, J.A.M.A. 145:193-200 (Jan. 27) 1951.
2. Churchill, E. D.: The surgical treatment of the wounded in the Mediterranean Theatre at the time of the fall of Rome, Ann. Surg. 120:268-283 (Sept.) 1944.
3. Mason, J. M., III: The early treatment of thoraco-abdominal wounds", South. M. J. 45:30-34 (Jan.) 1952.
4. Mason, J. M., III, and Giddings, W. P.: Experience with lumbar sympathetic ganglionectomy for wounds of major blood vessels of the lower extremity. Surg., Gynec. & Obst. 81, (Aug.) 1945.
5. Second Auxiliary Surgical Group: Forward surgery of the severely wounded, Report to the Surgeon General, U. S. Army, 1945; Resuscitation and preoperative care of the severely wounded p. 23-49.
6. ibid Wounds of the stomach, pp. 211-229.
7. ibid Wounds of the colon and rectum pp. 270-306.
8. ibid Thoracic wounds, Initial surgery, pp. 411-536.
9. Simeone, F. A.: Atomic bomb in injury: mechanical injuries. J.A.M.A. 147 1658-63, (Dec. 22) 1951.
10. Wolff, L. H., and Adkins, T. F.: Tourniquet problems and war injuries, Bull. U. S. Army M. Dep. 87:77-84 (April) 1945.

1415 Peachtree St., N. E., Atlanta

RADICAL PROCEDURES

as Palliative Measures in

in CARCINOMA *of the*

GASTROINTESTINAL TRACT

ENOCH CALLAWAY, M.D., LaGrange

Even though lesions of the gastrointestinal tract are too far advanced to hope for a cure by surgery, the best palliative measure is radical surgery. Many of these cases live a much longer and a much more comfortable life following as complete removal of the lesions as is possible, than they would live if some palliative measure, such as gastroenterostomy or colostomy were performed without removal of as much of the grossly diseased tissue as can be done. The truth of this statement is very clearly shown by statistical data from all cancer clinics where radical palliative measures have been practiced. It is even more strikingly proven if one can see

---

Cancer Commission
of the MAG

---

the actual patients and see how much more improvement in their general health and well-being takes place following radical procedures.

In carcinoma of the stomach, if the total or subtotal resection can be performed, the patients do much better than they do with the simple short-circuiting operations. Many of these patients with liver metastases live longer and much more comfortable lives after their gross ulcerating lesions have been removed. If the malignant area is at the lower portion of the stomach and has so completely invaded the pancreas and surrounding tissues that it is technically impossible to remove it, it has been found that an occlusion operation, dividing the stomach as high up as possible, closing the distal segment and anastimosing the ileum to the upper portion, gives a greater amount of comfort and a longer survival rate than any simple short-circuiting procedure.

In carcinoma of the colon, long periods of survival in relatively good health may frequently be obtained by radical procedures, although at the time of operation it is found that the carcinoma has already metastasised to lymph nodes and nodules are present in the liver. There have been cases operated on where such conditions as rectovaginal fistulas had already occurred from the extension of the carcinoma who have regained a large amount of their former health and survived two to three years.

Any surgeon doing abdominal surgery should become very conscious of the necessity of carrying out radical resections for carcinoma. These radical resections should be carried out even though there is a very small hope for ultimate cure. When these patients come to surgery they are usually in such a condition that they are doomed to a very miserable and painful existence for the very short period they have to live. Both the patient and the surgeon have everything to gain by the surgeon's carrying out extensive radical removals of all gross malignant tissue. Neither the patient nor the surgeon has anything to gain by being conservative. The usual consideration for the patient's immediate condition and for his recovery from the operation, having in mind the idea that if the patient lives he can be operated on again, does not hold true in malignancies of the gastrointestinal tract. It is a case of now or never, and the surgeon should never let the patient's immediate condition influence the extent of the surgery. I know of several instances where radical procedures carried out purely for palliation have surprised me very much by apparently resulting in permanent cures.

The Association

Meeting of the Committee on

CONSTITUTION *and* BY-LAWS

The first meeting of this Committee was held on February 10, 1952 at the Association headquarters office, Academy of Medicine, Atlanta, with Dr. Enoch Callaway, Chairman, presiding. Present were Drs. Allen H. Bunce, A. M. Phillips, C. F. Holton, David Henry Poer, Mr. John Dunaway, Mr. Sid Wrightsman, Jr., and Dr. Callaway.

The Committee discussed in detail proposed amendments to the existing Constitution and By-Laws of the Medical Association of Georgia and agreed on the following:

(In each of the quoted passages that follow, a word or phrase within brackets indicates a deletion from the existing text, while an italicized word or phrase, an addition to the present phraseology, as recommended by the Committee.)

PROPOSED AMENDMENTS TO THE CONSTITUTION:

1./ Article VI, Council, Sec. 2:

"Sec. 2. The Council shall consist of the President, the President-Elect, the Secretary-Treasurer and one Councilor from each [Congressional] *Councilor* District in the State of Georgia."

2./ Article VIII, District Societies:

"In order to promote the best interests of the profession, the House of Delegates shall provide for the division of the State into Councilor Districts which [shall] *may* be coextensive with the Congressional Districts in Georgia, and for the organization of all component county societies in the districts into Councilor District Medical Societies."

3./ Article IX, Officers, Sec. 1:

"Sec. 1. The officers of the Association shall be a President, a President-Elect, two Vice-Presidents, a Secretary-Treasurer and one Councilor, *or, in his absence, a Vice-Councilor,* from each of the Councilor District Societies as provided in the By-Laws. All elections shall be held as prescribed in the By-Laws."

4./ Article X, Funds and Expenses:

A comma added in line eight following the word, "publications."

PROPOSED AMENDMENTS TO THE BY-LAWS:

1./ Chapter 1, Membership, Sec. 10:

"Sec. 10. Eligible physician members of the State and Federal medical services and full-time members of approved medical faculties *not engaged in private practice of medicine* shall pay half the annual dues of the Association provided similar action has been taken by the component county society."

2./ Chapter III, House of Delegates, Secs. 2, 3, 4, and 6:

"Sec. 2. Each component county society shall elect one delegate and a corresponding alternate for each [fifty] *twenty-five* members, or fraction thereof, etc."

"Sec. 3. [Thirty] *Forty* of the registered members of the House of Delegates shall constitute a quorum, etc."

"Sec. 4. The House of Delegates shall be presided over by [the President and in his absence, by a Vice-President or by a delegate agreeable to it.] *a Speaker, or a Speaker pro tem, whose election shall be the first order of business at the opening session. In the absence of both, a delegate agreeable to it may preside.*"

"Sec. 6. The following shall be the general Order of Business at all meetings of the House of Delegates: 1. Call to order by the President; 2. Roll Call; 3. [Reading and adoption of minutes] *Election of Speaker and Speaker pro tem;* 4. Reading and adoption of minutes; 5. Reports of officers; 6. Reports of Committees; 7. Unfinished business; 8. New Business."

3./ Chapter IV, Council, Secs. 2, 9, and 11:

"Sec. 2. The Council shall be composed of the President, the President-Elect, the Secretary-Treas-

urer and one Councilor *or Vice-Councilor* from each Councilor district, etc."

"Sec. 9. (beginning line 8) . . . A physician residing in a county not having a component society, shall be referred to [the nearest] *an adjacent* component county society, etc."

"Sec. 11. (beginning line 5) . . . The Council shall adopt an annual budget providing for the necessary expenses of the Association, which shall be prepared and presented for its consideration by the Committee on Auditing and Appropriations at the [first] *last* meeting of the Council in the [first] *last* quarter of each year, etc."

4./ Chapter V, Election of Officers, Secs. 1 and 3:

"Sec. 1. The President-Elect, Vice-Presidents, Secretary-Treasurer, [and] Councilors *and Vice-Councilors* shall be elected by ballot by the members of the Association. Nominations for these officers except Councilors *and Vice-Councilors* shall be made orally as the [first] *last* order of business at the [beginning of the afternoon] *first* meeting on the first day of the scientific session. [before the presentation of any papers.] No nominating or seconding speech shall exceed two minutes. The President shall appoint a Committee of *not less than three* Tellers immediately after the close of nominations *who shall have charge of the election.*"

"Sec. 3. The Secretary-Treasurer shall have prepared in advance an official ballot. One ballot shall be given to each active voting member when [requested] *he presents himself to cast his ballot.* Such member and no other shall prepare his ballot and shall deposit it *at that time* in a locked ballot box provided by the Secretary-Treasurer and kept in [his] *the* custody [or that] of the Tellers designated by the President. The key shall be kept by the [Secretary-Treasurer of the Association or] Chairman of the Tellers."

5./ Chapter VI, Duties of Officers, Secs. 1, 3, and 4 (a):

"Sec. 1. The President. The President shall preside at [all meetings] *the organization meeting* of the House of Delegates and *at all meetings* of the Association and shall appoint all committees not otherwise provided for. He shall deliver an address at such time during the annual session as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession *and of the Association in* the state during his term of office. [and] So far as practicable *he* shall visit by appointment the various district societies, etc."

"Sec. 3. The Vice-Presidents. The Vice-Presidents shall assist the President in the discharge of his duties. Upon request *or in the absence* of the President, the Vice-Presidents will preside over the general meetings of the Association in rotation, etc."

"Sec. 4. The Secretary-Treasurer. (a) (beginning line 6) . . . He shall be Secretary of the Council and its Executive Committee *and ex officio member of all committees.*"

6./ Chapter VII, Component County Societies and District Societies, Secs. 1, 2, and 11:

"Sec. 1. County and District Societies. (at end of Section 1) . . . *A component society shall consist of three or more active members.*

"Sec. 2. Charter. (beginning line 7) . . . The House of Delegates shall have authority to revoke the charter of any component county society or district society whose actions are in conflict with *the letter or spirit of* this Constitution and By-Laws, etc."

"Sec. 11. Purposes and Duties of District Societies. District Societies shall have [two] *one or more* meetings during the year, etc."

7./ Chapter IX, Standing Committees, Secs. 1, 4, 10, 11, 12, 13, 14 and 15:

"Sec. 1 (b) Committee on [Public Policy and] Legislation

(*h*) *Committee on Maternal Welfare*
(*i*) *Committee on Rural Health*
(*j*) *Committee on Industrial Health*
(*k*) *Committee on Public Relations*
(*l*) *Committee on Cancer*
(*m*) *Committee on Insurance*"

"Sec. 4. The Committee on [Public Policy and] Legislation. etc." (Each reference thereto in Section 4 to be corrected accordingly.)

"Sec. 10. The Committee on Maternal Welfare shall be composed of seven members, three of whom shall be general practitioners. It shall regularly review and analyze the causes of all maternal deaths occurring in the state. It shall investigate conditions affecting maternal care in Georgia and make recommendations concerning improvements thereof. It shall establish a working liaison with the Georgia State Obstetrical and Gynecological Society and the Georgia Pediatric Society and shall consider the establishment of annual postgraduate regional courses in obstetrics throughout the state with the cooperation of the Committee on Medical Education and Hospitals. The Director of the Maternal and Child Health Division of the State Department of Public Health shall be a member of the Committee on Maternal Welfare and shall act as its secretary for all purposes of convenience."

"Sec. 11. The Committee on Rural Health shall concern itself with improving medical service in the more sparsely settled areas in the state. It shall be composed of one member from each of the Councilor Districts comprising the Association, in addition to the Director of the State Department of Public Health who shall be a member ex officio. It shall investigate and make recommendations as to locating and staffing health centers and shall cooperate with the Council on Rural Health of the American Medical Association. The Committee shall designate a member to represent the Medical Association of Georgia at national conferences on rural health."

"Sec. 12. The Committee on Industrial Health shall be composed of eight or more members so that there may be one from each of the major industrial areas in the state. The Director of the Industrial Hygiene Division of the State Department of Public Health shall be a member ex officio. The committee shall confer with both labor and management in

stressing the importance of preventive rather than curative medicine. It shall investigate and make recommendations concerning the initiation of programs designed to improve safe working conditions for employees and to solve other industrial health problems. It shall cooperate in all respects with the Council on Industrial Health of the American Medical Association."

"Sec. 13. The Committee on Public Relations shall be appointed by the President. It shall be the duty of the committee to integrate and publicize all approved plans and projects emanating from the Council and other standing and special committees of the Association. It shall consider all policies and make suggestions and recommendations for improving or changing such policies for the purpose of integration and publicizing. It shall develop additional projects for bettering understanding between physicians and the public."

"Sec. 14. The Committee on Cancer shall consist of one representative from the Association, one from each of the State-Aid Cancer Clinics, and one each from the Medical Colleges in the state who shall serve not less than three years, and the President shall appoint the chairman from among the members having the longest service. The chairman shall submit a list of physicians' names representing these groups for appointment by the President. An Executive Committee of this committee consisting of not less than six members shall be appointed by the President upon recommendation of the chairman.

"It shall be the duty of this committee to represent the members of the Association in dealing with all matters pertaining to cancer, and in particular, it shall advise with the Division of Cancer Control of the Department of Public Health."

"Sec. 15. The Committee on Insurance or Insurance Board shall consist of not less than five members appointed for a period of five years in rotation by the President. The Committee may elect one of its members to be chairman or request the President to designate a member as chairman. Members appointed during the first four years shall serve staggering terms as designated by the President.

The four geographical quadrants and the central industrial area shall have representation on this committee. Also the chairman may nominate five lay persons with known interest in the field of insurance for appointment by the President, who shall serve with the Board in an advisory capacity.

"It shall be the duty of this committee to formulate and administer all policies and plans pertaining to insurance insofar as such concern members of the Association. In particular it shall sponsor and promote The Georgia Plan including provision for necessary expenses."

8./ Chapter X, Special Committees, 2

Delete: ["2. Insurance and Economics"] changed to Standing Committee under the title of Committee on Insurance.)

9./ Chapter XI, The Journal, Sec. 2.

"Sec. 2. The Council may employ [an Executive Secretary and] a Business Manager of The Journal *and other personnel* and fix the terms of such employment."

PRESS COMMENT: *Ridley Award Is Well-Earned*

The State Board of Health has conferred a high award upon Dr. C. L. Ridley as a "distinguished medical man of Georgia" and his fellow citizens here in Bibb County share with him the satisfaction which comes from such deserved recognition.

Dr. Ridley was graduated from the Augusta School of Medicine almost half a century ago and has held many prominent positions in the medical world since that time.

For fifteen years he was a member of the State Board of Health and for four years was the head of that organization. He was the superintendent of Macon Hospital from 1937 until a short time ago.

The burden of the hospital became so great that no one man could carry it so the duties were divided and Dr. Ridley was made medical director. Before taking up his work with the Macon Hospital Dr. Ridley had been an active member of the City-County Board of Health.

In accepting the certificate given him this week by the Board of Health, Dr. Ridley recalled that not so long ago smallpox, malaria, typhoid and diphtheria were constant menaces to the public health.

Victims of smallpox were isolated in pesthouses and there were other crude methods for the treatment of other diseases. Many of them have now been practically wiped out, but, as Dr. Ridley makes clear, the beginning was rugged and it has required time and patience for us to reach the present level.

Specifically, Dr. Ridley does not believe that tuberculosis can be brought under control in any period of 10 or 15 years. He reminds us that 80 per cent of the victims of tuberculosis are not at the Battey General Hospital, but are scattered throughout the state in private homes. It is obvious that we cannot make much progress in exterminating what is sometimes called the white plague so long as these conditions prevail.

It is up to the people to arouse themselves once more just as they did when they began crusading against the diseases which have now been practically conquered.

Once more, we congratulate Dr. Ridley upon the well-deserved honor that has been conferred upon him.

—Macon Telegraph

News and Information

PERSONALS

Maj. William G. Avery, Army Medical Corps, returned to his home in LaGrange late in January, after a year's service as second in command of a mobile surgical hospital in Korea. He was reunited with his wife, their three children, and his parents, Dr. and Mrs. R. M. Avery.

Dr. Van B. Bennett and his wife, *Dr. Sybil Corbett,* have opened offices in the Little-Green Hospital, Valdosta, where he will practice internal medicine and cardiology and she allergy and dermatology. Both are graduates of the University of Maryland School of Medicine, both have taken postgraduate training at University Hospital, Baltimore, Md., and at Massachusetts General Hospital, Boston, and both formerly practiced for several years in Jasper, Fla.

Dr. Robert C. Behrens, formerly of Atlanta, has opened an office in the Oakdale community, where he will serve the Fitzhugh Lee section of south Cobb County.

Dr. Pratt Cheek, of Gainesville, has moved his office from 100 Grove Street to a section of his home at 1016 Green Street Circle.

Dr. Harry L. Cheves, of Union Point, was the subject of a recent feature article in the Augusta *Chronicle* which told of his feat of building his own pipe organ in his home. The complicated process required years of work, and Dr. Cheves is planning to enlarge the instrument considerably. Both he and his wife play the organ.

Dr. A. W. Davis, of Warrenton, has been chosen Warren County's Man of the Year for 1951. Of 200-plus votes cast in the competition, he received 93 per cent.

Dr. Samuel J. DeFreese, Monroe physician and artist, recently addressed the Monroe Junior Woman's Club on the subject of Fine Arts.

Dr. M. Fernan-Nunez, a native of Emanuel County who for the past three years has been chief pathologist and director of laboratories at the Dublin Veterans Administration Hospital, has been advanced to the grade of chief. This is the highest rating in the VA department of medicine and surgery, the equivalent of the rank of brigadier general in the United States Army.

Dr. A. V. Gafford has become associated with the Harbin Clinic, Rome, where he limits his practice to ophthalmology and otolaryngology. He will be associated in his practice with Dr. George B. Smith and Dr. Tom Harbin.

Dr. Robert B. Greenblatt, of Augusta, will present a paper on "Common Misconceptions of Sterility and Threatened Abortion" on March 25 at the scientific assembly of the American Academy of General Practice at Atlantic City, N. J.

Dr. William H. Holden, explorer, traveler and medical specialist, has opened an office in the Fickling and Walker Apartment Building on New Street, Macon, for practice of eye, ear, nose and throat, and plastic surgery. A graduate of Tufts Medical School, Dr. Holden has practiced in New York City for 25 years and been connected with the Harvard Medical School for 10. His trips in the interest of science have taken him twice to the headwaters of the Amazon River in South America and on a 20,000-mile health mission through the Middle East. *Dr. William Barton,* of Macon, a former student of Dr. Holden at the Columbia-Presbyterian Medical Center in New York, was instrumental in attracting Dr. Holden to Georgia.

Dr. Joseph Hiram Kite, orthopedic surgeon of the Scottish Rite Hospital, Atlanta, on February 11 addressed the staff of the Veterans Administration Hospital, Dublin, on "The Operative Treatment of Fractures."

Dr. Joseph D. McElroy has returned to his office in the Doctors Building, Atlanta, after an absence of six months, during which time he did special work in psychiatry and neurology at St. Elizabeth's Hospital in Washington, D. C.

Dr. W. A. Matthews has reopened his office at 3894 Peachtree Road, Brookhaven, Atlanta, after doing graduate work at Emory University for the past six months.

Dr. Lewis H. Oden, Jr., of Blackshear, recently was promoted to the rank of lieutenant colonel in the U. S. Air Force. Stationed at Bryan (Tex.) Air Force Base, Col. Oden serves as wing flight surgeon and commanding officer of the 3530th Medical Group. Dr. Oden practiced in Blackshear for three years before and four years after World War II, being recalled to active duty in 1950.

Dr. T. A. Peterson, Savannah, addressed a community meeting at Richmond Hill February 12 on the relationship of health and religion.

Dr. J. Righton Robertson, Augusta, has been named head of the Richmond County Board of Health. He succeeds *Dr. J. Victor Roule,* who had held that office for 12 years.

Dr. Alex B. Russell, of Winder, president-elect of the Georgia State Board of Medical Examiners, and Mrs. Russell in February attended the annual conference on Medical Education and Licensure in Chicago, Ill.

Dr. Emile O. Scharnitzky, of Augusta, and Mrs. Margaret Triplett Langley, of Thomasville, were married on January 25 in Thomasville.

Dr. and Mrs. Edgar D. Shanks, Jr., of Atlanta, are the parents of a son, Stephen Roberts, born February 13 at Emory University Hospital.

Dr. J. G. Standifer, of Blakely, addressed his city's Rotary Club on January 18, discussing the past and the future of Blakely.

Dr. and Mrs. E. Y. Walker, of Milledgeville, attended the sessions of the South Atlantic Association of Obstetrics and Gynecology at Clearwater, Fla., in January.

Dr. R. D. Walter, of Calhoun, was named vice-president of the Northwest Georgia Council, Boy Scouts of America, at the 21st annual banquet of the group held January 28 in Rome. Named to the council committee-at-large was *Dr. W. D. Hall,* also of Calhoun.

Dr. William D. Wilson, of Savannah, spent two weeks in January observing plastic surgery procedures at the clinic of Dr. Vilray P. Blair in St. Louis, Mo.

LETTERS

Emory University, Ga.
February 14, 1952

To the Editor:

On behalf of our patrons we would like to take this opportunity to extend our thanks for the many periodicals that you have made available for their use. Our own thanks you have heard repeatedly.

All of the journals have been of service, but one title, the *New England Journal of Medicine,* should be singled out for special mention. We are particularly grateful for this one.

Cordially,
MILDRED JORDAN, *Librarian*
A. W. Calhoun Medical Library
Emory University

Clarksville, Ga.
February 19, 1952

To the Editor:

I was quite interested in the comment on the paper. [Dr. Henry refers to his paper, "Abdominal Puncture as a Diagnostic Aid," published in the February, 1952, JOURNAL.—EDITOR] The "ambiguous term" abdominal puncture has been used to differentiate it from paracentesis, which is usually associated with trocar aspiration of ascites.

I believe the contraindications are more mythical than real. I have never seen any ill effects resulting from the many abdominal taps which I have done. As to negative results it is clearly stated that a negative tap must be considered as meaningless (under "Discussion").

There is no implication in the paper that a negative tap should be considered "reassuring."

Sincerely,
CHARLES M. HENRY, M.D.

Atlanta, Georgia
December 21, 1951

To the Editor:

We in the State Health Department, especially those in the Mental Hygiene Division, would like to express our approval of the plan proposed in the September issue of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA and your method of handling the resulting publicity in the November issue of the JOURNAL.

The Mental Hygiene Society is developing a pamphlet in regard to psychiatric facilities in general hospitals which we feel sure will be of a great deal of interest to the physicians throughout the state.

Sincerely yours,
T. F. SELLERS, M.D.
Director

Atlanta, Georgia
February 20, 1952

To the Editor:

Just a brief note to congratulate you on the fine changes in format of the JOURNAL as evidenced in the January edition. I, for one, feel that it is a remarkable improvement over the old form. I am sure your subscribers will thank you for the much more attractive and readable Journal.

Sincerely,
JERRY BAKER
Educational Director,
Georgia Heart Association

Minneapolis, Minn.
February 8, 1952

To the Editor:

Our Editorial Committee is very much impressed with the new dress of your journal. We like the format, and think that the organization will add much to the convenience of the reader. The contents, always well selected and well edited, now have the benefit of good typographical display.

We are, of course, pleased, too, that you have chosen Times Roman for your type dress. Our publisher has made the same choice, and starting with the April 1 issue, *Modern Medicine* will appear in Times Roman dress.

With kindest regards, I am

Sincerely,
MARK S. PARKER, *Executive Editor*
Modern Medicine

Macon, Ga.
February 11, 1952

To the Editor:

I have just finished reading the NEW JOURNAL and find it most attractive and readable. You are to be congratulated for this forward step which will be of great benefit to the members of the Association and its Auxiliary.

The division of sections and the new, easily read type are especially helpful, and the personal news items and meeting notices are good. I was particularly happy to find a section under News and Information with the title "Auxiliary".

May I take this opportunity also to thank you for the cooperation and help you have given the Auxiliary this year.

Sincerely yours,
MRS. J. R. S. MAYS, *President*
Woman's Auxiliary to the
Medical Association of Georgia

Atlanta, Ga.
March 1, 1952

To the Editor:

Congratulations to you and your staff on the new type and style set-up and colorful covers of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA. I am sure that the Association members will be proud of their Journal.

With kindest regards,

Sincerely,
HAROLD P. MCDONALD, M.D.

Emory University, Ga.
March 3, 1952

To the Editor:

I think the job you have done on the *Journal is* terrific. It's really thrilling. Keep it up.

Sincerely yours,
PAUL B. BEESON, M.D.

Marietta, Ga.
February 18, 1952

To the Editor:

I want to congratulate you on the beautiful new edition of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA. It is not only more attractive in color and style, but the subject matter, so well-arranged, is more legible in its new type.

May the strides of progress be continuous under the capable guidance of you and your coworkers, Miss Berry and Mr. Wrightsman.

With best wishes, I am

Sincerely yours,
MRS. RALPH W. FOWLER, *President-Elect*
Woman's Auxiliary to the
Medical Association of Georgia

Mendota, Ill.
February 21, 1952

To the Editor:

We feel that the new JOURNAL gives ample evidence that a modernization of presentation need not be accomplished at the expense of dignity or an overall conservative approach . . . We want to extend our congratulations on a job well done . . . Several of the original layouts were excellent.

We cannot remember seeing a more attractive medical journal.

Sincerely yours,
KENNETH B. BUTLER
GEORGE C. LIKENESS
Butler Typo-Design
Research Center

Atlanta, Ga.
February 18, 1952

To the Editor:

We want to congratulate you upon the January issue of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA. We are impressed with the new and attractive cover, and with the "readability" of the new type, styling, and design. You have done a good job.

Sincerely yours,
FRANK WILSON, *Superintendent*
Grady Memorial Hospital

Atlanta, Ga.
February 6, 1952

To the Editor:

May I congratulate you upon the new cover and the very attractive JOURNAL format. The changed type and makeup throughout the JOURNAL are most attractive. Please accept for yourself and staff my hearty congratulations. For a number of years I have been interested in various types of publications

THANK YOU ALL

As much as he would like to, the Editor is unable to acknowledge individually the commendatory words which have come from scores of persons—by letter, telephone, and personal contact—regarding the JOURNAL's "new look." For the staff and himself, he takes this method of expressing deep-felt appreciation.

and am aware of the time and effort that have gone into the complete change that you have given to the JOURNAL.

I am confident that physicians throughout the State, as well as your exchanges in other states, will note the new JOURNAL with interest and satisfaction.

Sincerely,
R. C. WILLIAMS, M.D., *Director*
Division of Hospital Services
Georgia Department of Public Health

Oklahoma City, Okla.
February 8, 1952

To the Editor:

Congratulations are certainly in order, and I am genuinely happy to extend mine on the new cover of your JOURNAL and its new internal format.

Sincerely,
JOHN K. HART
Associate Executive Secretary
Oklahoma State Medical Association

MISCELLANY

The purchase in January by Drs. William G. and Miriam W. Chambless of the 10-room Harris County Health Foundation clinic in Hamilton brought to a successful conclusion a campaign by citizens of that area to obtain the services of a resident physician for that locality.

The Harris County Health Foundation, Inc., a non-profit organization with more than 300 members, had held title to the clinic for a year and a half pending its sale to a physician desiring to practice permanently in that county. Last July the husband-and-wife physician team occupied the clinic on a trial basis, and at the end of a six-month period the two doctors exercised their option to buy it.

The civic-minded Harris County holders of membership certificates in the foundation now are redeeming them at face value. They have given the residents of the county more than they had bargained for: two doctors rather than one.

As the result of a campaign launched in 1949 by the Meigs Kiwanis Club, a new clinic of 10 rooms or more was formally opened on February 14 in that Thomas County community. The clinic will be operated as a private undertaking by Dr. Ehrhardt Zinke, who will be assisted by a nurse and a receptionist.

The opening ceremony included short talks by Dr. Fred Murphy, of Archbold Memorial Hospital, Thomasville, and Lee E. Kelly, of the Thomasville *Times-Enterprise*.

More than 100 citizens subscribed $25,000 to erect the clinic in the Kiwanis-sponsored drive to get better medical facilities for the community.

Elected officers of the clinical staff of the Savannah Health Center recently were: Dr. Jules Victor, Jr., president; Dr. Allen Coward, vice-president, and Miss Charlotte Inglesby, secretary. Twenty-five physicians donate their services to the 35 clinical sessions held weekly at the center.

Twenty-nine million American homes are now receiving through the mails sheets of Easter Seals, for this annual appeal by the National Society for Crippled Children and Adults and its 2,000 affiliates is under way from March 13 to April 13.

Doctors find the treatment and training for crippled children which augments their own efforts through the more than 500 specific facilities maintained by the nation's Easter Seal societies and through the services of more than 2,000 professionally trained persons, such as therapists, psychologists, medical social workers and educators.

Last year the societies extended help to 228,000 crippled children and adults. Funds are being sought this year to support a $10,000,000 program.

All donations by physicians to the 1952 Heart Fund Drive will go into a newly created Doctors' Fund for Cardiovascular Research. Spokesmen for the Georgia Heart Association said the doctors themselves were instrumental in establishing the new research fund, and add that the action was prompted by "the increasing importance of scientific research in efforts to control heart disease and by the need for funds to finance heart research."

Dr. Harry T. Harper, of Augusta, president of the Georgia Heart Association, will lead the statewide solicitation. More than 350 doctors are active members of the heart association, and nearly 2,400 Georgia phyisicians are supplied educational information by the group.

DEATHS

ANDERSON: *Dr. William Willis Anderson,* Atlanta pediatrician, died February 1, his 63rd birthday anniversary. Native of Danburg, near Washington, Ga. Was graduated from the University of Georgia, finished his medical training at Johns Hopkins University, began practice in 1919. State chairman of American Academy of Pediatrics for the past five years, past president of Georgia State Pediatric Association and Fulton County Pediatric Society.

CLEMENTS: *Dr. Henry W. Clements,* 74, who had practiced in Adel for more than 50 years, died February 6. Born in Lanier County, Georgia, he was graduated from the University of Georgia, stud-

ied medicine and surgery in New York and Chicago. Former member of State Board of Health; county physician for 20 years. During his lifetime he served as local surgeon for the Southern, South Georgia and Florida Railways.

DANIEL: *Dr. Walter Wright Daniel,* 55, Atlanta physician, died February 24, two days after being stricken at his office. Born in Columbia, S. C., he was graduated from Wofford College, received his medical degree from Emory University School of Medicine in 1923. Served overseas with Emory Medical Unit I in World War I, and for four years was member of Emory Faculty as instructor in physiology and assistant professor of medicine. Had been president of Fulton County Medical Society, whose grievance committee he was instrumental in establishing; president of staff of Crawford Long Hospital and its chief of obstetrics and gynecology; president of the Georgia chapter of the American Academy of General Practice, which chapter he helped found; president of Atlanta Wofford College alumni. Was president of Fulton-DeKalb unit of American Academy of General Practice at time of death. As trustee of Fulton County Medical Society, helped plan the present Academy of Medicine. Fellow of International College of Surgeons, member of Kappa Sigma, Alpha Kappa Kappa, Southeastern Surgical Congress and Atlanta Optimist Club, which has established a Boys Work Memorial Fund in his honor.

HALL: *Dr. Thomas Marshall Hall,* 80, retired Baldwin County physician, died at his home in Milledgeville January 30. Had been in poor health for some time and for the past year had spent most of his time in his room. Born in Milledgeville, the son of Dr. and Mrs. William Hansell Hall, he was one of the first captains of the cadet corps at Georgia Military College, Milledgeville. Was graduated in 1893 from Southern Medical College, now Emory University School of Medicine. Practiced in Milledgeville from that year until July 9, 1930, his 59th birthday anniversary, when he retired.

HEYSER: *Dr. David Thomas Heyser,* 65, for 32 years physician with the Fulton Bag and Cotton Mill, Atlanta, died January 30 after a week's illness. Born in Leitchfield, Ky., he was graduated in medicine from the University of Louisville in 1909, came to Atlanta in 1919.

LORD: *Dr. Columbus B. Lord,* 69, who had practiced medicine in Jefferson for 27 years, died February 2 after an illness of several months. Graduated from the Medical College of Georgia in 1913.

PEELER: *Dr. Julian Edwin Peeler,* 82, Woodland physician, died February 14. He had practiced medicine more than 60 years.

WILSON: Dr. James I. Wilson, 87, died at his home in Ochlocknee January 29 after an illness of several years. Native and lifelong resident of Thomas county, he attended Johns Hopkins Medical School, interned at New York Polyclinic. Entered medical practice in 1891.

AUXILIARY

Bibb County Auxiliary is preparing a series of articles on medical and public health topics which are being run regularly in the *Macon Telegraph and News.*

Cobb County Auxiliary members at their meeting on January 9 heard an address by Mrs. Florine Dunstan, Ph.D., head of the Spanish department at Agnes Scott College and wife of Dr. Edgar M. Dunstan, of Atlanta. Mrs. Dunstan, who twice has received Carnegie grants to enable her to study in Spain and in South America, told of her last summer's trip to Spain. The meeting was held at the Norman Collins home on Church Street. Mrs. Bruce Burleigh presided.

The Cobb Auxiliary also sponsored a February visit to Marietta by the Red Cross Bloodmobile, with the result that the greatest number of volunteer donors in the history of the county—250-plus—offered to give blood. Every member of the Auxiliary who was acceptable gave a pint.

Fulton County Auxiliary had a full program for its January 4 meeting at the Academy of Medicine. First Mrs. Alva Maxwell, president of the Atlanta Federation of Women's Clubs, gave a humorous skit about doctors' wives. Then Mrs. Walter W. Daniel, chairman of the Red Cross committee, discussed plans for setting up first-aid and surgical-dressing classes. And finally, Dr. Edgar M. Dunstan, chairman of the medical civilian preparedness committee of the MAG, told how the group might best serve in the Civil Defense program.

Mrs. Walker Curtis, Auxiliary president, was in charge of the meeting. Mrs. E. A. Bancker served as program chairman, and Mrs. M. T. Edgerton and Mrs. E. L. Askren as hostesses for the luncheon which followed the meeting.

Georgia Medical Society Auxiliary members met February 8 at the Savannah home of Mrs. F. Bert Brown, with Mrs. Harry Portman, Mrs. Charles Usher, Mrs. A. J. Kelley and Mrs. Julian K. Quattlebaum serving in addition as hostesses. Committees for the Doctors' Day party to be held at the Moose Club on March 28 were appointed by Mrs. Harold Smith, chairman of the Doctors' Day committee. Mrs. Charles Usher will give the radio address and write the Doctors' Day editorial.

Mrs. Kelley gave a paper on mental hygiene. An appeal was made at the meeting for Red Cross workers and for persons to take staff aid, canteen or motor service courses.

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI APRIL, 1952 NUMBER 4

Editorials

The 1952 ANNUAL SESSION

The program of the 102nd Session of the Association, including that of the Woman's Auxiliary, appears in this issue and you are requested to give it your careful attention and study. It represents many hours of hard labor by the program committees and the central office, and while perfection was not attained, yet it is felt that, decidedly, this is the best program ever offered to the members of the Association.

First, there will be 12 outstanding guest speakers, each an authority in his particular field. The expenses of these guests will be borne for the most part by the specialty groups that they represent, and the Association hereby acknowledges its indebtedness for this valuable contribution. Secondly, the President of the American Medical Association and his wife will be our guests, as well as the President of the American Academy of General Practice, who, as a past Vice-President of the AMA, remains active in its affairs. Likewise, the Washington office of the Civil Defense Administration is sending strong representation to bring up-to-date information on its vital work.

For the general practitioner, there will be a general session each morning with both members and guest speakers providing a full schedule. Special groups will meet in sections each afternoon with eight separate programs to be given. In addition, five special symposia and panel discussions have been arranged to carry the program through three full days. Altogether, 57 members of the Association will participate in the presentation and discussion of papers.

The Joint Memorial Service will be given on Sunday afternoon at an appropriate time and place. The Woman's Auxiliary will participate in this as well as in the Civil Defense Program on Tuesday.

The social events are outstanding and will be highlighted by the President's Dinner on Tuesday evening. Each day, various specialty societies will sponsor luncheons, and on Monday evening the medical schools alumni associations will hold their annual dinners. The golf tournament will be held all day Wednesday at the East Lake Country Club to be climaxed by a special dinner at which five prizes will be awarded. Several special "social hours" have been arranged to add zest to the occasion.

Motion pictures will be shown each morning preceding the general sessions with the producers on hand to discuss the films and answer questions. Special "wet plaster" clinics will be presented to demonstrate the application of casts on patients. A daily demonstration of fresh surgical pathology specimens has also been planned. A large group of scientific and commercial exhibits will fill the new Exhibit hall of the Biltmore, which will provide the finest facilities available for our Session.

Make your plans now to be in Atlanta from May 10 to 14 inclusive.

X-RAY SERVICES *and* HOSPITAL CARE

The hospital bed shortage is being made more critical in many localities by the admission of ambulatory patients to obtain the x-ray benefits of hospitalization policies.

A much sounder method of handling x-ray costs would be their inclusion in an expanded version of the Georgia Plan for Medical Care so that x-ray services could be handled on an outpatient basis. To prevent possible abuse, the coverage could be on a deductible basis as, for instance, costs above an arbitrary figure of something in the range of $15.00 to $25.00.

Perhaps even more important to the consumer of medical care is insurance covering radiation therapy. Most commonly, this type of therapy follows an operation with hospitalization for which the finances of the patient are already depleted. Deep x-ray therapy coverage could be included in the Georgia Plan without materially increasing the cost of the policy.

While action on these matters must wait further developments, certainly planning and discussion at this time are justified.

HERBERT M. OLNICK, M.D.

THE PHYSICIAN *and* RURAL HEALTH

That officers of the Medical Association of Georgia, recognizing the need for a Rural Health Committee in the state, recently saw fit to designate a three-member team temporarily to act in such capacity until proper provision in the By-Laws could be made is an action worthy of commendation.

Most certainly, the first and logical step in solving any problem is the recognition of its existence and the acceptance of the fact that a solution is never beyond attainment.

Rural citizens in Georgia are many. Their health problems, like those peculiar to rural areas elsewhere in the nation, are legion. It is unfortunate, but true, that farm people for too long have tended to look solely to available physicians to keep them healthy or to cure them when ill, giving little consideration to the role which they themselves must play in the attainment and maintenance of physical well-being.

It goes without saying that, to gain a proper understanding of the rural health problem, careful consideration must be given to what constitutes *health* on one hand, and *medical care* on the other. And the individual who fails to discern this viewpoint or who neglects his responsibility in this respect will forever find it impossible to obtain sufficient doctors, nurses or hospitals to assure good health.

Certainly, every rural resident must be led to understand that his own physical well-being, and that of his entire family, to a large measure perforce must fall to his own effort . . . to proper diet, installation of sanitary labor and living methods on the farm and careful observation of safety measures in farm machinery operation. The physician in a rural area should initially be utilized to immunize farm families against preventable diseases, not alone called in to cure illnesses which, at the outset, could have been avoided by early employment of commonsense measures by the farmer.

Education is the key to solution of rural health problems. And the Rural Health Committee may serve in precisely that capacity, with the aid of such interested allied agencies as the extension service of the land-grant college, local health council and the various divisions of the State Department of Public Health. It is of utmost importance that doctors take the lead in assisting the farmer to solve his own health problems. In a free enterprise system, the physician is helpless unless the public is educated in this respect.

The Council on Rural Health of the American

Medical Association, since its inception in 1945, has come-up with some excellent findings in regard to the subject and has expressed its eager enthusiasm to assist the Committee in all possible ways.

On February 29, in excess of 500 medical and farm leaders gathered in Denver for the Seventh Annual Conference on Rural Health, sponsored by the AMA. Dr. J. B. Kay of Byron, as Rural Health Committee Chairman, was in attendance and has since described the ardent enthusiasm with which participants were fired. The Conference's theme . . . how to help rural communities help themselves to better health . . . was reported in many newspapers and magazines and was broadcast by radio in the Denver area and throughout the midwest.

Rural health in Georgia can be improved. The ball has begun to roll and support of the Committee's work by all members will keep it rolling and guarantee results.

CANCER THERAPY *and* PATHOLOGICAL ANATOMY

With present day means of treating malignant diseases it is of vital importance that the fundamentals of pathological anatomy be strictly observed and its potentialities recognized if we are to improve our end results.

Much has been written and discussed about the early signs and symptoms as a yard-stick in the improvement of the five year survival rate in neoplastic diseases. One of the most pressing needs at the present time is recognizing the pathological process when therapy is contemplated. In the majority of instances, neoplastic therapy is performed in the office and in institutions where a highly trained pathological anatomist is not immediately available. If we are able to recognize the lesion in its gross appearance and proper therapy is applied with adequate margin, either by surgical excision or irradiation therapy, many needless recurrences will be prevented. Often times recurrent lesions are seen because of the failure to fully appreciate the potentialities of the pathological process.

There are certain characteristics that differentiate a benign lesion from a malignant one. Benign tumors are generally encapsulated and slow in growth whereas malignant lesions ulcerate, invade, and metastasize. Tumors vary in their behavior according to sex, age, the anatomical location, rate of growth, metastatic potentialities, lymphatic pathways, the type of tissue from which they originate, and their cellular arrangement. There are certain tumors of specific anatomical locations which are clinically benign, but the rate of growth may be changed by inadequate therapy, and the tumor will undergo malignant transformation.

Great clinicians of the early 19th Century, Laennec, Bright, Addison, Hodgkin, and others, gave us our background for the understanding of diseases in pathological anatomy. These investigations were strengthened and augmented by the development of general anatomy and histology, founded by Bichat (1771-1802). Other workers contributed to our histological knowledge of diseases, but it was Virchow (1821-1902) who gave us the final concept of cellular pathology. These principles, expounded upon during the 19th Century, are the basis upon which our concept for the management of malignant diseases rests today. Pathological anatomy provides the means for a fuller understanding of the origin and course of pathological lesions.

How proficient should the therapist be in pathological anatomy? It is not necessary that one have a long period of training in morbid anatomy. The individual should be able to apply the knowledge he is given during his period of undergraduate training. Unfortunately, this does not hold true. There is a great chasm existing between the physician's undergraduate days and the time that he puts into practice his knowldge of patholgy. There are many times when the average individual has difficulty in interpreting pathological reports, as to whether or not the description signifies a benign or malignant process. Therefore, he should be able to recognize the gross characteristics of the lesion and anticipate its celular appearance. He need not be well versed in the nomenclature of histological confusion, as the question at hand is whether or not the lesion is benign or malignant. It is true that the clinician must seek information from the pathologist, likewise, the latter must have information from the clinician regarding the clinical course of the disease. So often the pathologist receives inadequate history of the disease. Thus, each crosses over into the field of the other, for pathological anatomy and clinical medicine are scientifically compatible and complimentary to each other.

An urgent plea is made of the therapist to utilize and expand his knowledge in pathological anatomy whereby definitive treatment may be applied and

secondary therapeutic procedures will not be necessary. "In cancer therapeusis the primitive doctrine of kill or be killed is especially true. Action must be swift, decisive, and heroic. To temporize is to surrender without battle. To economize in the scope of our surgical or radiological attack is to fall short of success. To consider post-therapeutic deformity is to lose the battle. Here most certainly the more one saves the part the more surely one has lost the whole", Schoolman and Anderson.

The principle duty of the clinician is the recognition and treatment of disease for the benefit of the patient.

—Hoke Wammock, M.D.

PRIMAQUINE:

A New Drug for the Radical Cure of Relapsing Vivax Malaria

The development of primaquine, a new antimalarial drug now administered to all servicemen returning from Korea, represents a collaborative research effort which grew out of experiments conducted near the end of World War II, when thousands of drugs were tested as antimalarial agents.

A Columbia University scientist, Dr. Robert Elderfield, first synthesized primaquine in 1945. He was then working under a grant from the Office of Scientific Research and Development. Five years later, Dr. Elderfield, with the support of a United States Public Health Service grant, was able to effect commercial synthesis of the drug.

The period between these two accomplishments saw a number of important advances on other fronts. At the Institute for Medical Research, Christ Hospital, Cincinnati, Dr. Leon Schmidt began his neuropathology and toxicity studies on primaquine in December 1947—also under Public Health Service auspices.

The following spring Dr. Alf S. Alving of the University of Chicago undertook a series of human toxicity studies and clinical investigations among prisoner volunteers at Stateville Prison, Joliet, Illinois. Financial support for this work was supplied by the Public Health Service, with the Army Medical Research and Development Board furnishing the services of two medical officers. As a result of these tests, Dr. Alving was able to demonstrate for the first time that primaquine could be given in adequate dosages without side effects. The drug showed remarkable promise as a radical cure for malaria, proving effective even against a stubborn strain of *vivax* malaria found in certain Southwest Pacific areas.

At the request of the Army, Dr. G. Robert Coatney of the Public Health Service in April 1951 inaugurated an extensive research project to further test primaquine on prisoner volunteers at the Federal Penitentiary in Atlanta. This work was financed by the Army Research and Development Board and carried out in cooperation with the Federal Bureau of Prisons, Department of Justice. Over 200 prisoner volunteers were infected with malaria.

Primaquine was tested also on military personnel at Fort Benning, Georgia and Fort Knox, Kentucky to determine its effectiveness against the Korean strain of malaria and to discover whether the drug had any undesirable side-effects when given to healthy men engaged in normal activities. These tests showed that primaquine produced no toxic effects when given in single doses of 15 mg. daily for 14 days. Among those receiving the drug after developing acute malaria, no recurrences were reported at either Fort Benning or Fort Knox after periods up to 86 days. The Fort Benning tests were under the direction of Dr. G. Robert Coatney of the National Institutes of Health, Public Health Service, who served as senior consultant to the Army Surgeon General. Dr. Alving organized the Fort Knox tests, which were later supervised by Dr. Ralph Jones, Jr., of the University of Pennsylvania.

These investigations were followed up by a final test completed last October. Research teams headed by Dr. Alving administered 15 mg. doses of primaquine to 2,700 soldiers returning to this country from Korean duty aboard two transports. This study showed primaquine produced no ill effects when given in daily doses aboard ship.

The Public Health Service, the Army, and the Navy are continuing their investigations of primaquine to determine finally the dose needed for the most rapid cure.

The Army's adoption of primaquine for administration to all servicemen returning from Korea has been endorsed by the National Research Council's Subcommittee on Malaria and by the Armed Forces Medical Policy Council.

Scientists point out that primaquine is not a preventive for malaria and is not a substitute for chloroquine as a suppressant in malarious areas. It is, however, an effective curative agent. Given in 15 mg. doses daily for 12 to 14 days the drug will cure the Korean type of malaria in most instances.

—Harold M. Janney, M.D.

PUDDERY:

How NOT to Write a Paper

Across our desk there recently passed a small but powerful monograph entitled "Rx for Medical Writing," written by Jordan and Shepard. It will be reviewed in the usual manner, but it is strongly recommended that all prospective and potential authors of medical papers give it their immediate and careful attention, and thus assure themselves of better productions with much less effort. Any overworked editor will gladly lend you his copy.

The chapter that caught our eye and provided most interest was entitled "The Second Revision," but was most concerned with obscure writing which has been defined as "Puddery," by Sir Ernest Gowers. He noted as a basic fault in present-day writing the "tendency to say what one has to say in as complicated a way as possible." The patient "was not carried home drunk," but rather "was conveyed to his place of residence in an intoxicated condition." He could not simply "die," but "progressed to a fatal termination." The height of absurdity is quoted from the "You Can't Win" department of the non-medical, but frequently anatomical *New Yorker*:

"We know, for example, that, as a general rule, the lean, asthenic type has an autonomic nervous system that is characterized by the preponderance of parasympathetic impulses to the viscera resulting often in the eventual production of such clinical syndromes as the asthmas, or the enteric spasms and peptic ulcers; we know by the same token, that the pyknic, bull-typed person has vegetative functions that are predominantly sympathetic, producing eventually such clinical syndromes as the anginas or general vasospasms."

The condition can be cured they state facetiously by following the six rules laid down by Williamson:

1. Never use a short word, when you can think of a long one (currently, rather than now).
2. Never use one word when you can use two or more. ("Available evidence would tend to indicate that it is not unreasonable to suppose," instead of "probably").
3. Put one syllable thoughts into polysyllabic terms.
4. Put the obvious in the terms of the unintelligible.
5. Announce what you are going to say before you say it, or say what you have said after you say it.
6. Defend your style as scientific; sneer at clear simple English as popular or journalistic.

They suggest the clearing of one's thought machinery by allowing days to elapse between drafts. Also the beneficial effects of a colleague's frank comments. You may choose tables, charts, photographs or text, but avoid duplication. Restrain yourself from flights of literary fancy—if you are compelled to use them, put them in the first draft, but promptly take them out of the second. They recommend staying away from dead or foreign languages, but none could be better than the one their title page:

"Quidquid Praecipies Esto Brevis."

PRESS COMMENT: *Solving the Problems*

Every fair-minded person recognizes that there are problems connected with medical care for the people which remain unsolved. By the same token, every fair-minded person also recognizes that tremendous progress in expanding and bettering medical care has been made in recent years.

The voluntary medical insurance systems, which provide protection for the family at a cost of a few dollars a month, have been an outstanding success. Their membership runs into the tens of millions and is growing still. But the proponents of compulsory government health insurance, which is a polite term for semi-socialized medicine, have criticized them on the grounds that they do not cover catastrophic illness—that is, chronic ailments of long duration.

Yet the fact is that the proposed government insurance system does not meet this problem. It provides only for brief and limited period of hospitalization and other services. It would offer nothing that private plans do not offer. But it would substitute compulsion for voluntary action by the individual, and it would saddle the medical fraternity and the taxpayers of the nation with a great new bureaucracy with an annual budget of many billions.

Moreover, much work is now being done by the medical men and the voluntary insurance organizations in attacking the problem of catastrophic illness. It is an extremely difficult problem, and it will not be solved quickly or easily. But, step by step, the goal of ever-improving medical care for all is being reached.

—The Madisonian, Madison.

Scientific Articles

Plastic Repair of

DEFECTS OF THE MOUTH

W. STEWART FLANAGIN, M.D., Augusta

The mouth is a prominent part of the face that is constantly seen by observers. Due to the muscular arrangement and to the distance from bony attachment the lips are free to move in any direction. So the mouth dominates ever changing facial expression. Any defect, lack of symmetry, alteration in color or size, or limitation of motion is quickly and inerasably noticed by all observers.

The oral fissure is sensitive to injury and may be easily deformed and distorted as a consequence of scars that contract. It is a law that when there is lack of resistance nature heals with contracture. This is frequently seen after a deep burn over the flexor surface of a joint. Following extensive injury, the lips, due to their elastic soft tissue construction, are prone to contract and any part of the mouth may be distorted by this process.

Losses involving the lower lip are more frequent than those of the upper lip due to the increased incidence of malignancy here. There are, in most cases, many methods of repair from which one may choose to reconstruct the great variety of defects about the mouth. It is necessary to restore the affected part to normal appearance and function and to retain the delicate muscular balance of the mouth.

A chronic fissure of the lower lip is sometimes seen and it usually begins in the center of the lip at the muco-cutaneous junction, extends over the vermilion and vertically down the buccal mucosa. Chronic inflammation produces contracture and finally a notch develops in the center of the lip. A similar minor defect of the upper lip is seen with redundancy of the vermilion and asymmetry following a transverse laceration of the lining near the lip border. The scar contracts and becomes fixed to the subcutaneous tissue. Asymmetry is seen and upon smiling the defect is exaggerated because this segment is unable to stretch out from lack of normal elastic mucosa.

To correct these lining contractures it is necessary to incise along the scar, and after removing it, make a small Z-plasty. This maneuver has the dual purpose of spreading the fixed points, and breaking the straight-line scar with a staggered one, thus preventing a second contracture (Fig. 1).

The Z-plasty is useful anytime it is desirable to spread two points farther apart, that is, in a contracture. To do this the Z is marked out, the flaps elevated and transposed before suturing. The two points will be some 30 per cent longer after transposition. Actually skin is borrowed from the sides to lengthen the center line. It is also an efficient way to stagger a scar, and this is essential to prevent contracture in an area where a laceration or incision passes across the lines of skin tension. An incision will heal with less contracture when it passes parallel to the lines of skin tension, or what is commonly called Langer's Lines.

Full-thickness avulsions from the corner of the mouth to the ramus of the mandible should be repaired with a three-layer closure. These deep lacerations passing back from the mouth are usually in a poor direction for healing without contracture because they cross the lines of skin tension. To reduce this tendency a straight-line closure must be avoided by cutting many small Z's in the skin, transposing the flaps and suturing. In closing a full-thickness tear

Read before the Medical Association of Georgia in annual session, Augusta, April 18, 1951.

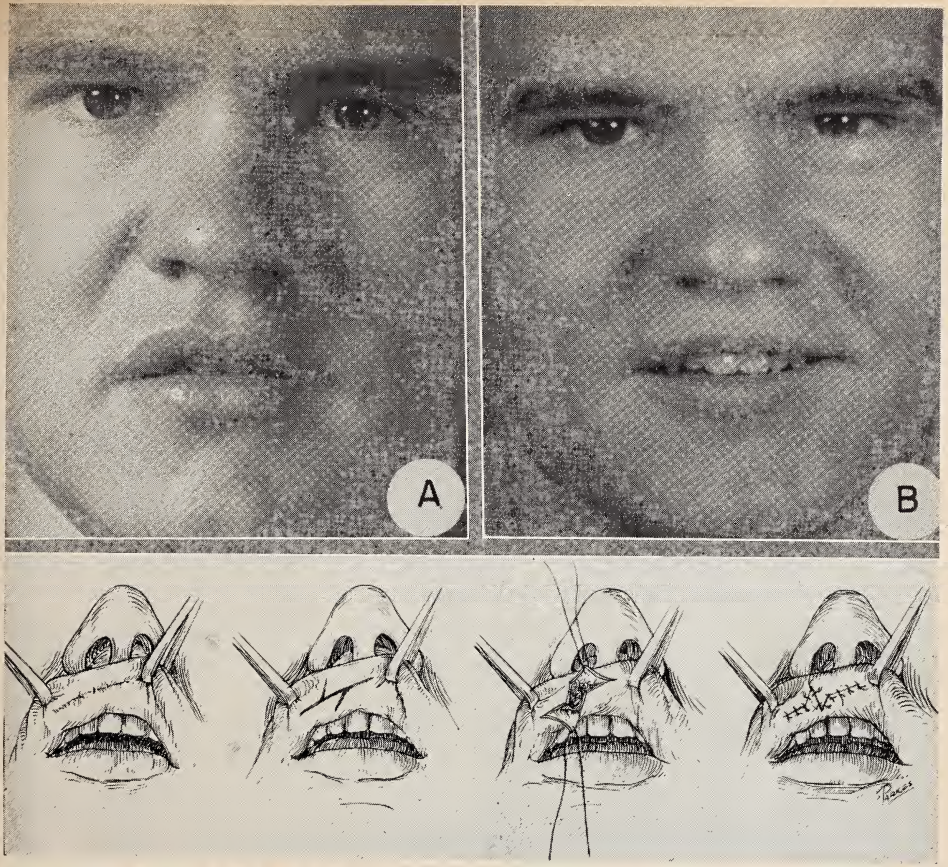


Fig. 1. (a) A defect on the right side of the upper lip that is exaggerated on smiling due to contracture following traumatic transverse laceration of the mucosa. Asymmetry and vermilion redundancy can be seen. (b) Appearance after repair by the method depicted in the drawings below. The scar was incised, a small Z cut and the flaps transposed, thereby preventing a secondary contracture on completion of healing.

Fig. 2. (a) Preoperative view of a full thickness cheek tear from the corner of mouth to ramus of mandible. (b) Appearance after closure.



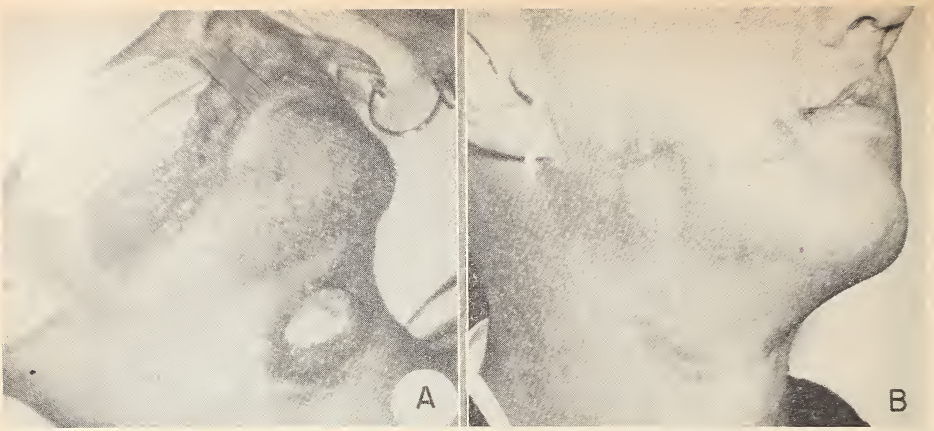


Fig. 3. (a) Preoperative view of mouth fissure resulting from an electric burn. (b) Postoperative. After closure of neck and cheek defect by contiguous flaps. The fissure was closed by suturing the mucosa, muscle and skin at different levels so as to stagger the scar.

Fig. 4. (a) Fistula in cheek. (b) After closure of fistula in one operation. (c) Drawings to show method of repair. A hinge-flap was turned back to line the fistula. A second flap was then elevated from in front of the ear and rotated to resurface the denuded area.

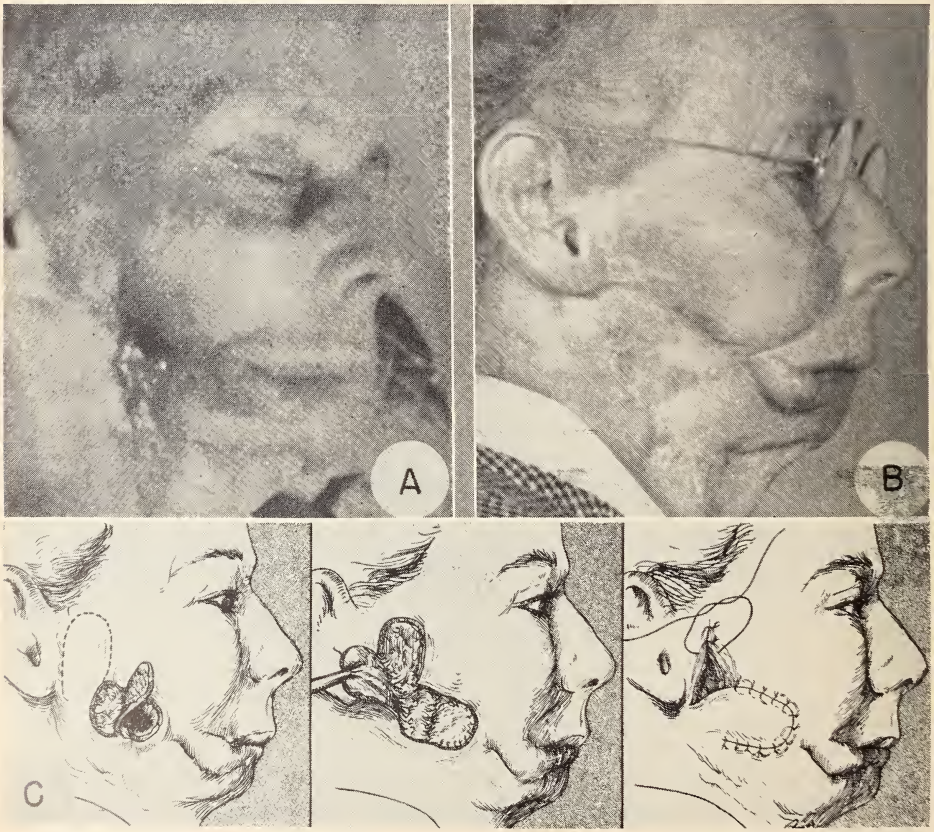




Fig. 5. (a) Malignancy with ulceration in right nose-lip region. Excision indicated by broken line includes all structures to mucosa. (b) A flap was marked to the right of the mouth, elevated, rotated, and sutured into the defect as indicated by the drawing. (c) Sutures in situ. (d) Final appearance showing good cosmesis and no deformity at the donor site.

the mucosa, muscle and skin should be sutured at different levels so as to stagger the scar and gain rapid healing with better appearance and function. This principle should be followed in lining any cavity and the layers not superimposed one over the other directly (Figs. 2 and 3).

Frequently a fistula of the cheek is repaired by bringing in flaps from a distance after many operations. Here, is seen a method of repair done in one operation by turning a small hinge flap back like the leaf in a book for a lining. A second flap is then elevated, rotated and sutured to cover all raw surfaces. All cavities must be lined to get prompt healing. The cornified epithelium of a flap or a free graft is a good substitute for normal mucosa (Fig. 4).

Every effort should be exhausted in the repair of any defect to use tissue adjacent to the defect.

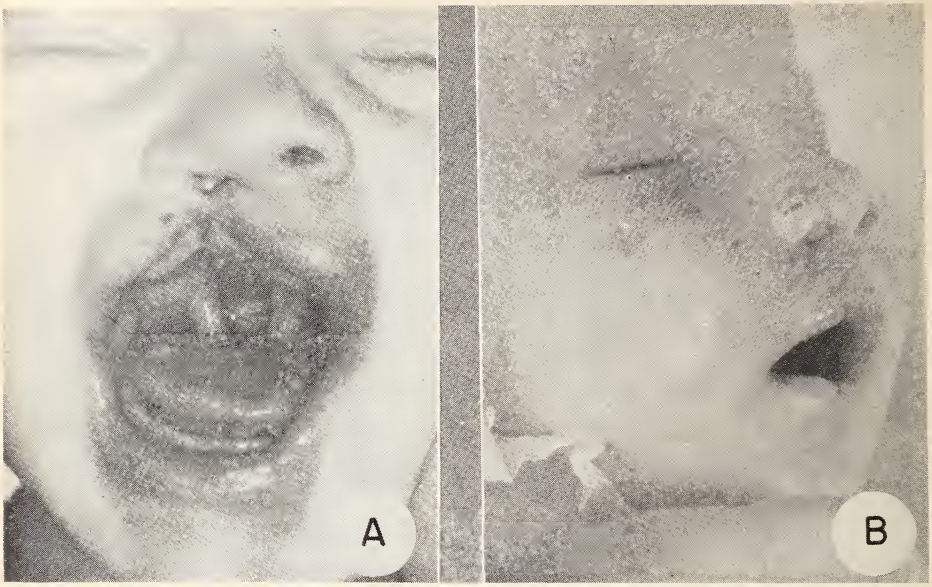


Fig. 6. (a) An incomplete right-sided hare-lip with associated slumped nostril. A cleft of the palate can be seen. (b) Six days after repair of the hare-lip by the Hagedorn method.

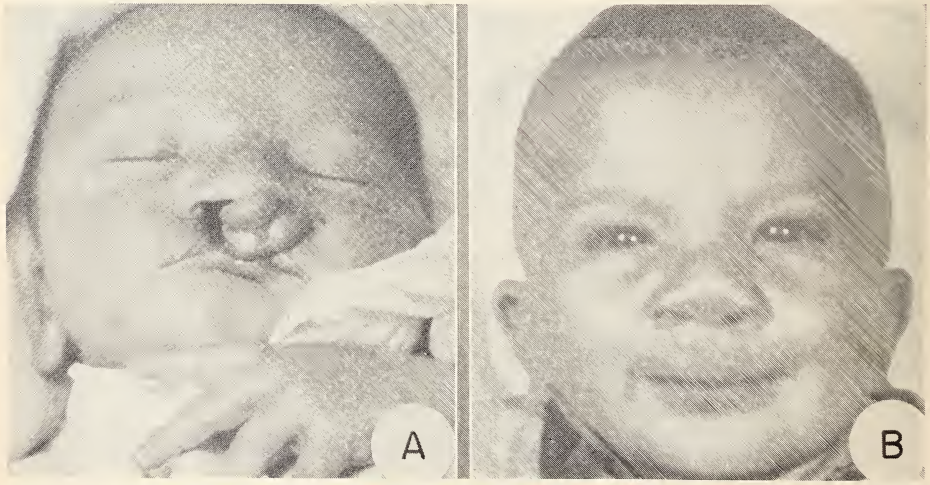


Fig. 7. (a) A complete double hare-lip. The premaxilla protrudes beyond the arch of the alveolus. (b) After the premaxilla was set back and the lip repaired.

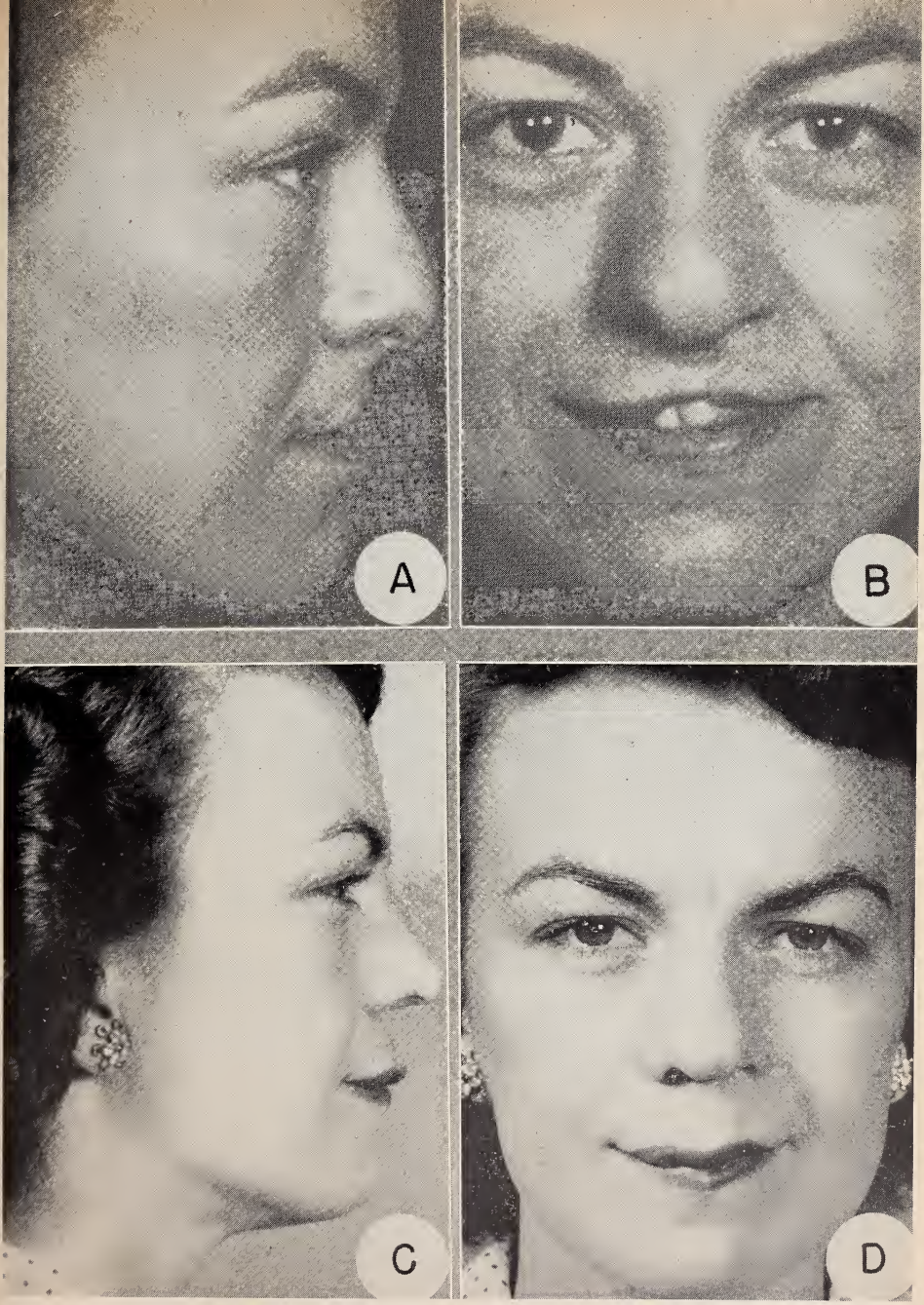


Fig. 8. (a) Right side view of a markedly deformed upper lip as a result of a double hare-lip. The tip of the nose is retruded due to the short nasal columella. The upper lip is too short and tight with much scarring in the center. The lower lip protrudes beyond the upper lip—the reverse of normal. (b) The scarring is seen and the short upper lip fails to cover the crooked teeth. This condition can be easily diagnosed from a distance. (c) After repair. The center of the upper lip was advanced to lengthen the columella of the nose, thereby correcting the retrusion. Flap from lower lip supplies necessary tissue for large defect of upper lip, restoring normal relationship to lower lip. (d) Front view to show the full thickness flap that was switched from the lower lip into the defect of the upper lip. Marked improvement in appearance is seen, with the upper lip covering the teeth and restoration of the profile lines to normal.

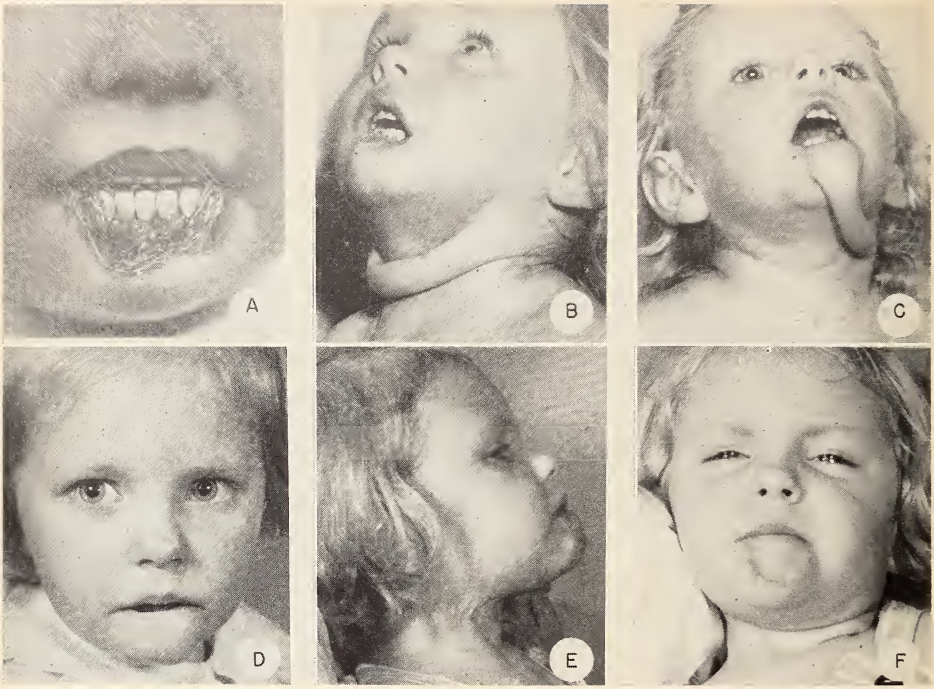


Fig. 9. (a) Traumatic Void of Lower Lip. (a) A transverse cervical skin tube has been constructed. (c) The tube is attached to the defect. (d) The tube has been detached. (e) Profile appearance after final plastic operation when excess fat was removed. (f) Final appearance. Front view.

Sometimes it seems that we lose sight of this principle and become engrossed in mobilization of large tube pedicles or flaps when a good reconstruction could be obtained with fewer operative stages by using the available adjacent tissue.

A loss of tissue in the nose-lip region that cannot be repaired without shifting tissue may be accomplished by the elevation of a flap from the side of the mouth and rotation to fill the defect. This may be done easily in an elderly person whose skin is relaxed with minimal scarring and no deformity. It often is not necessary to smooth out the "dog-ear" (Fig. 5).

These rotated French flaps are one of the ideal methods of repair of facial defects from the standpoint of tissue cost, time used in reconstruction and cosmesis. It may be difficult to visualize the reconstruction by this means and imagination and experience are helpful. By their use one-stage operations may be performed. To get a safe transfer with complete survival of the flap its length should not exceed its width by more than 3 to 1. The plan of reconstruction should be slow and deliberate for it is impossible to retrace the steps once the plan has been carried out.

Hare-lip and cleft palate deformities are the most frequent congenital defect of the face, occuring in some 1 in 700 births. There is a lack of fusion of the defective bony and soft parts early in utero. Double clefts are most difficult to repair satisfactorily. They constantly have a short columella and the premaxilla may protrude in advance of the arch of the alveolus. The cleft lips are repaired early but the palatal defects are delayed until the child is some two years old (Figs. 6 and 7).

An individual who has had an adequate repair of an old double cleft of the lip in infancy may seek relief upon reaching maturity from the typical facial stigma of such a defect. They are overwhelmed by an inferiority complex and are crippled in a true sense. On analysis such a lip is usually short, tight and scarred. The nostrils are not symmetrical and are of poor shape due to the tip of the nose being held too close to the face by the short columella. On profile the retruded tip of the nose is quickly detected. There is often a noticeable lack of tissue in the center of the upper lip. The lower lip protrudes in advance of the upper lip—the reverse of normal. From quite a distance one can diagnose the condition.

The problem is how to restore a normal profile and frontal appearance with the least number of

operations. All objectives can be accomplished by advancing the lip onto the columella, thereby lengthening the tip of the nose and giving it a normal dorsal curve. Then a wedge full-thickness flap is rotated out of the lower lip 180 degrees with a single narrow attachment along one side carrying the inferior labial artery for nutrition. After the upper lip has been opened and the scar excised, this wedge flap from the lower lip is attached and sutured into the defect. In some two weeks the pedicle is severed and its edges trimmed and sutured (Fig. 8).

A deep burn around the mouth will result in contracture and ectropion. When healthy tissue is available this may be corrected by rotating a flap from the naso-labial groove to fill the gap that must be created to overcome the ectropion. Very often, due to the lack of undamaged skin near the mouth, it is necessary to resort to free skin transplants. The color and texture of the skin of the face and neck is unlike that of any other part of the body. For instance, a free graft placed upon the face from the arm or thigh will stand out as a conspicuous white patch in contrast to the surrounding ruddy face skin. Also, full thickness skin-grafts are the ideal replacement for lost skin due to the full complement of dermis with its rich supply of elastic fibers. A thin partial thickness graft contracts very much while a full-thickness graft contracts very little. A limited amount of full-thickness skin is available from behind the ears and the neck for grafting. Grafts from these areas are preferred for peri-oral skin defects.

In extensive losses of the lower lip it is necessary to supply tissue, lining and covering. A flap may be brought in from the arm but its color contrast leaves much to be desired. A flap may be brought down from the forehead to supply a good reconstruction. A flap can be brought from the neck that is ideal and that will leave less scarring than the forehead flap. A tube may be constructed on the neck and its tip folded back to line the inside of the lip. A red vermilion must be grafted on with mucosa or tattooed to complete the repair (Fig. 9).

NOTE: The author is indebted to Mr. Norrie Parkes for the drawings and to Mr. Jack Wood and Mrs. Virginia Woodward for the photography.

JACK C. NORRIS, M.D., Atlanta

The Etiology and Treatment of FEVER BLISTERS

Herpes labiallis is a simple but annoying disease of a very common order which afflicts most people some time during life. The cause of the malady is unknown. Trauma to the lips, exposure to excessive sunlight, allergy to foods, chemical irritants, intestinal intoxications, local infections, the common cold, febrile diseases, kissing, and sexual intercourse, have each been incriminated as etiologic factors. The most popular opinion now extant is that a small medium-sized virus is the agent which produces the blister.

Pathologically, the lesion we refer to occurs most often on the lips of the mouth, and one can recall some slight trauma which preceded the onset; or the patient sometimes awakes from a restful sleep to find his lip burning and stinging at some point, and he then realizes that several days of bothersome irritation will ensue before recovery. Primarily, the involved area presents a slightly raised, edematous spot, which is quite sensitive and at times painful. In a period of hours a blister appears. The vesicle overlays an inflamed, slightly red base. As fluid increases, tension results and the epithelium is expanded, inflammatory cells invade the region and finally the cavity breaks and the fluid flows out, leaving a denuded raw point. Following this chain of events, a crust forms. Often single lesions are followed by several others, and a large part of the lip may become most unsightly and smoking or eating becomes a most uncomfortable and painful function. At the moment I cannot think of any such simple disease for which more treatments have been recommended and tried than for herpes. One modern textbook listed nineteen different remedies which are supposed to be helpful. These agents range from dusting powders to x-radiation and antibiotics, with a liberal purging pitched in to help. One person suggested that eating of a liberal quantity of canned pork and beans would cure the condition. We who have practiced medicine long enough eventually reach an age where we finally realize that

Read before the Medical Association of Georgia in annual session, Augusta, April 18, 1951.

many remedies for a disease probably indicates lack of knowledge as to what to do.

I want to take this opportunity to propose a treatment for fever blisters which is so simple that I have hesitated for a long time to publish it. In my hands, and in the hands of others who have tried the remedy, it appears that the application of an ordinary styptic pencil to the blister is the answer to the problem. The styptic should be used as early as possible after the blister begins to appear. First, lightly moisten the area and the pencil tip and then rub the caustic gently and thoroughly into and over the vesicle area until a slightly smarting and drawing sensation occurs. Shortly, the pain disappears and the burning ceases, and cure begins. When treated early, only two or three applications are necessary. In applying the styptic, care should be taken not to over-irritate by too much rubbing.

Sometimes an early infection of a secondary type ensues and the treatment should be followed by using a mild ointment, such as boric acid or aureomycin. The stiptic is not recommended in cases where massive herpes have occurred from sunburn and it is not to be used in lesions that might be due to chemicals or syphilis. So far, I have not found this therapeutic method in any textbooks or *Journals* reviewed.

The styptic pencil which I have so far found to be most efficacious is Requa's, containing 90 per cent alum sulphate.

TICK PARALYSIS

ROBERT P. COGGINS, M.D., and *JOSEPH H. DERIVAUX, M.D.*, Atlanta

In the summer of 1951, two patients referred to the Contagious Disease Unit of Grady Memorial Hospital with tentative diagnoses of acute anterior poliomyelitis were found to have tick paralysis. Although this condition is relatively uncommon, the potential fatality associated with it and the dramatic reversal of symptoms which occurs if the offending tick is located and removed make it important for the physician to be aware of its occurrence. The purpose of this paper is to report these additional cases and to review briefly the salient features of this interesting syndrome. A more complete analysis of tick paralysis has been furnished by Abbott in 1943,[1] and Stanbury and Huych in 1945.[2]

CASE REPORTS

Case 1. M. H., a 4 year old white female from a rural area in North Georgia, was admitted July 2, 1951, with an illness which began three days previously with fever, anorexia, and abdominal pain. One day before admission she developed pain in both lower extremities and was unable to stand. On the day of admission she was referred by her physician to Grady Hospital with the provisional diagnosis of acute anterior poliomyelitis.

Except for a rectal temperature of 100.4° F, the general physical examination was normal. Neurologic survey showed a flaccid paralysis of both lower extremities. There was slight nuchal rigidity. The cranial nerves were intact. The reflexes of the upper extremity were physiological. The upper abdomnial reflexes were hypoactive; the lower abdominal reflexes were absent. The patellar, Achilles and plantar reflexes were absent bitlaterally. Sensory examination was within normal limits.

Lumbar puncture yielded clear spinal fluid containing only 5 lymphocytes per cu. mm. The peripheral white count was 23,600 with 90 per cent polymorphonuclears and 10 per cent lymphocytes. Urinalysis gave normal findings. Further examination of the patient revealed a large engorged tick on the left side of the neck, under her long blonde hair. Removal of the tick was followed by dramatic improvement of paralysis during the next 24 hours. She became afebrile, muscular function returned completely, and she recovered uneventfully.

The tick was identified by entomologists at the Communicable Disease Center, Chamblee, Georgia, as a gravid female *Dermacentor variabilis Say*.

Case 2. M. O., a 2 year old white female from College Park, Georgia, was admitted Aug. 10, 1951. Five days prior to admission she had developed malaise, anorexia and vomiting. On the day before admission while attempting to get out of bed, she had fallen to the floor and the parents noted that her gait was unsteady and her legs were weak. By the day of admission, weakness of the legs was so severe that she could not stand. She could not hold objects in her right hand. She was referred by her physician to Grady Hospital with the presumptive diagnosis of acute anterior poliomyelitis.

Rectal temperature was 99.2° F. Except for moderate pharyngeal injection and slight cervical lymphadenopathy, the general physical examination was normal. Neurologic survey showed weakness of all extremities. The neck was supple; a "head drop" was present. Cranial nerves were intact. There was symmetrical hyporeflexia in the upper extremities, with bilateral weakness, more marked on the right. Abdominal reflexes were absent. The patellar, Achilles and plantar reflexes were absent bilaterally and the lower extremities showed a flaccid paralysis.

Lumbar puncture yielded clear spinal fluid containing one polymorphonuclear leukocyte per cu. mm. The peripheral white count was 19,700 with 50 per cent lymphocytes, 48 per cent polymorphonuclears and 2 per cent eosinophils. Urinalysis was negative.

After a careful search, a moderately engorged tick was found on the patient's scalp, just to the left of the external occipital protuberance. It was hidden by her long blonde hair. Within 12 hours the patient could stand and by the following day, recovery was complete.

From the Medical Service, Grady Memorial Hospital, Atlanta.

DISCUSSION

The first recognized cases of human tick paralysis in North America were reported by Todd from British Columbia in 1912.[3,4] Subsequently, many cases were reported from the northwestern United States and western Canada. In all these cases from the West, the etiological agent was the wood tick (*Dermacentor andersonii Styles*). It was not until 1938 that cases were found in the eastern portion of the United States[5,6] Robinow and Carroll,[5] from the Medical College of Georgia, reported the first instance of tick paralysis in which the responsible agent was definitely identified as the American dog tick (*Dermacentor variabilis Say*). Subsequently, a number of cases have been reported from the East and Southeast, the tick in all these cases being *Dermacentor variabilis Say*.

The tick transmitting the paralysis is almost invariably a gravid female. It is necessary for the tick to remain attached for several days (average one week) before signs of paralysis develop.[7] A neurotoxin elaborated by the tick is thought to be responsible for the paralysis,[8] but in spite of extensive experimental work the exact site of production and the nature of this toxin is uncertain.[1,9] The toxin probably affects the lower motor neurons of the spinal cord and cranial nerves.[8] Experimental studies have shown that once a tick has produced paralysis in a host, it is incapable of producing subsequent paralysis, even if it becomes attached to another host.[10]

The prodromal phase of this disease is variable. Mild malaise, restlessness and irritability are almost constantly encountered. Gastrointestinal symptoms of nausea, anorexia or diarrhea may be present. Fever, if present, is rarely more than 100° F. Dizziness and ataxia are often prominent features. After a variable number of hours, generalized weakness and an ascending flaccid paralysis develop. This is frequently first discovered when the patient awakens in the morning and is unable to stand. The deep tendon reflexes are diminished or absent. Characteristically, there are no sensory changes but patients sometimes complain of hyperesthesia or paresthesia in the affected limbs. As the process progresses there occurs paralysis of the muscles of respiration and deglutition, heralded by labored breathing, dysphagia and dysarthria. Rarely, the extraocular muscles may be involved. Death due to respiratory paralysis has occurred in untreated cases.

Laboratory findings are generally within normal limits. Although the leukocyte count is usually normal, a leukocytosis of 10,000 to 20,000 cells per cu. mm. is not rare. The cerebrospinal fluid is always normal.

Although all races and ages are susceptible, the disease is ten times commoner in children than adults,[11] and twice as common in females as males,[12] the long hair of young females being largely responsible for this difference. The disease has its highest incidence in spring and summer.

The offending tick may be located anywhere on the body, the most common sites being the scalp and neck. Care should be exercised to remove it completely, since it has been shown that retention of mouth parts can lead to a continuation of the paralysis.[13] The method of choice is to anesthetize the tick with ether or chloroform prior to its gentle removal with forceps. If mouth parts are retained they should be removed by local excision. Discovery of one tick should be an impetus to search for others, since multiple infestation is not uncommon. Following removal of the tick there is usually prompt improvement with recovery in one to three days. Occasional cases have been reported of prolonged convalescence.[2] Prompt discovery and removal of the tick is imperative in preventing a fatal outcome, since death has been reported in cases in which the tick was not removed until the paralysis had become far advanced.[14]

Since cases of tick paralysis are frequently confused with acute anterior poliomyelitis, certain differential features are worthy of mention. In tick paralysis the cerebrospinal fluid is within normal limits. The neck and back are supple and there is no muscular spasticity. The paralysis is ascending in nature and is almost always symmetrical. There is usually an absence of fever, even in the presence of progressing paralysis. Ataxia appears early and is a prominent early feature.

Other conditions in which confusion may arise include infectious neuronitis (Guillain Barre syndrome), polyneuritis, myelitis, spinal cord tumor and syringomyelia.[9] These diseases have fairly characteristic sensory involvement, not seen in tick paralysis.

Summary

Tick paralysis is a relatively uncommon cause of flaccid paralysis. The etiology and clinical manifestations are discussed. Treatment is simple and is generally followed by dramatic improvement. Some differential diagnostic features are presented. Two additional cases are reported.

REFERENCES

1. Abbott, K. H.: Tick Paralysis: A Review. I., Proc. Staff Meet. Mayo Clinic, 18:39, 1943; II., 18:59, 1943. 1a. Discussion by F. R. Heilman.
2. Stanbury, J. B., and Huych, J. H.: Tick Paralysis: A Critical Review, Medicine, 24:219, 1945.
3. Todd, J. L.: Tick Paralysis in British Columbia, Canad. M.A.J., 2:1118, 1912.
4. Todd, J. L.: Does a Human Tick-Borne Disease Exist in British Columbia? Canad. M.A.J., 2:686, 1912.
5. Robinow, M., and Carroll, T. B.: Tick Paralysis Due to the Bite of the American Dog Tick, J.A.M.A., 111:1093, 1938.
6. Beach, M. W., and Ravenel, B. O.: Tick Paralysis in South Carolina, J. South Carolina M.A., 37:323, 1941.
7. Hadwen, Seymour: On Tick Paralysis in Sheep and Man Following Bites of Dermacentor Venustus, with Notes on the Biology of the Tick, Parasitology, 6:283, 1913.
8. Hamilton, D. G.: Tick Paralysis: A Dangerous Disease in Children, M. J. Australia, 1:759, 1940.
9. Ransmeier, John C.: Tick Paralysis in the Eeastern United States, J. Pediat., 34:299, 1949.
10. Ross, J. C.: An Experimental Study of Tick Paralysis in Australia, Parasitology, 18:410, 1926.
11. DeSanctis, A. G., and Sant'Agnese, P. A.: Tick Paralysis (Report of a Case in New York), J.A.M.A., 122:86, 1943.
12. Jellison, W. L., and Gregson, J. D.: Tick Paralysis in Northwestern United States and British Columbia, Rocky Mountain M. J., 47:28, 1950.
13. Mail, G. A., and Gregson, J. D.: Tick Paralysis in British Columbia, Canad. M.A.J., 39:532, 1938.
14. Townsend, R. G., and Nash, J. F.: On Certain Diseases from the Fields and Woods, South. Med. & Surg., 192:386, 1940.

The Use of SULFA DRUGS *and More Recent Mold* ANTIBIOTICS *in* PEDIATRICS

C. DIXON FOWLER, M.D., Atlanta

The purpose of this paper is to place in a concise and understandable form our knowledge of the sulfa drugs and mold antibiotics as related to pediatrics for the benefit of those treating children.

The material presented has been obtained from personal use by the author of the drugs with most of the diseases involved, from observations by conferees as reported at staff conferences, numerous personal communications with pediatricians, the literature, and the Report of the Committee on Immunization and Therapeutic Procedures for Acute Infectious Diseases of the American Academy of Pediatrics.

In pediatrics it is a general rule that the dosage for all the sulfa drugs is one grain per pound body weight per day. In serious illness the dose may be doubled. In prematures the dosage should be one-half grain per pound body weight per day because of the premature infant having diminished kidney function.

Listed below are the sulfa drugs available today. The use of them is so generally well known that few details will be presented:

1. Sulfanilamide, prontylin, neoprontosil, and sulfapyridine which are all obsolete. 2. Sulfathiazole which is useful against the meningococcus, staphylococcus, streptococcus, pneumococcus, influenza bacillius, bacillary dysentary bacillus and the colon bacillus. It is potent but toxic. 3. Sulfadiazine; use same as for sulfathiazole but less toxic. 4. Sulfamethazine; use same as sulfathiazole and sulfadiazine, but is less toxic and is excreted more rapidly. 5. Sulfamerazine; use same as sulfamethazine except that it is excreted less rapidly than sulfadiazine or sulfathiazole. Caution—With all the above drugs an alkaline urine should be maintained. 6. Sulfacetamide; use same as above. It is less toxic and more soluble. (May be wise to maintain an alkaline urine.) 7. Gantrisin (diethanolamine); use same as above. Less toxic and does not form crystals in either alkaline or acid urine and does not require an alkali. Least toxic of all the sulfas and is excreted rapidly. It is recommended for general use in pediatrics except where specific drug is indicated in serious illness. 8. Sulfasuxidine. 9 Sulfathalidine. 10. Sulfaguanidine; only slightly absorbed from the intestine and useful chiefly against bacillary (shigella) infections.

With all of the sulfas the physician should observe for possible blood dyscrasias. The recent use of three of the sulfa drugs in combination, usually sulfadiazine, sulfamerazine and sulfamethazine, has been proved to be less liable to cause kidney complications than the use of any one of the sulfa drugs alone. One should however, be on guard against urinary changes and blood changes.

The sulfa drugs are usually given by mouth. In severely ill children the intravenous route should be used when necessary.

The sulfa drugs which may be given intravenously are:

1. Sodium Sulfadiazine 10 cc. vial containing 2½ Gm. The accompanying directions advise the use with 40 cc. of distilled water. There is danger of phlebitis when used in this dilution with children.

2. Sodium sulfamerazine, sodium sulfathiazole, sodium sulfacetamide, and gantrisin, all used very seldom.

All of the above intravenous agents may be given with five per cent glucose, normal saline with two and a half per cent glucose, or with specified amounts of distilled water. Rauber[1] states that they may be given with lactate Ringer's or with Hartman's solution. He advised against the use of the sodium salt with glucose for subcutaneous injection because with slow administration carmelization of the glucose will occur. Walker[2] recommends that *except with distilled water* they may be given in dilutions 100-500 cc. to reduce the danger of phlebitis. The giving of these drugs with distilled water is not recommended for use in treating children.

There have recently been presented to the profession combinations of the sulfa drugs with penicillin

Presented before the Fayette County Medical Society on Sept. 20, 1951, and before the Seventh District Medical Society of Georgia on Sept. 26, 1951.

for oral use. One should judge for one's self which should be used and generally adhere to the use of that one. Blood level determinations should be done when deemed important by the physician in charge.

Penicillin

Due to the frequent severe allergic reactions or abcess formations, the use of penicillin in beeswax should be entirely discontinued for use with children, and penicillin in oil is not advised. The best form of penicillin for intramuscular use with children is the aqueous suspension of procaine crystalline penicillin G. One cc. contains 300,000 units of the penicillin. The usual dose for children, including infants, is 1 cc. every 24 hours. From a practical standpoint, i.e., no freezing of syringes or needles after insertion of the needle, practically no allergic reactions or abcess formations, and the decrease of pain caused by the procaine, it is strongly advised to use only this form with children.

Penicillin in pediatrics is useful against staphylococcus aureus and albus, meningococcus, pneumococcus, many types of streptococci, tetanus, Vincent's infection, syphilis, influenzal meningitis, impetigo and gonococcus infection. In case of diphtheria it will erase 75 per cent of the strains of C. diphtheriae, but not without antitoxin[3]. There are numerous oral preparations of penicillin available, and in pediatrics one should always use the soluble forms. Plain penicillin G. may be given by any of the ordinary routes of administration. Crystalline penicillin G should be given by the intramuscular route only. For children sensitive to penicillin there are available penicillin O, and compenamine, which is 1-ephenamine penicillin G.

In osteomyelitis, serious infections involving the head, and any infection where life is involved, 100,000-200,000 units every three hours may be given. In bacterial endocarditis, 1-3 million units may be given every three hours. In severe illness penicillin blood levels should be determined. A new penicillin product for oral use is at present being introduced. It is N_1N^1—dibenzylethylenediamine penicillin. It has the advantage that it is stable at room temperature for eighteen months[4] when in solution.

Streptomycin

Streptomycin is available in four forms namely, hydrochloride, sulfate, calcium chloride and the di-hydrostreptomycin. The latter, being the most soluble—and if used for a short period—the least toxic of the streptomycins, is the form used for acute illness by many pediatricians today. In chronic infections such as tuberculosis, the di-hydrostreptomycin may be used during the acute state, and later a change should be made to the sulfate. The reason for this is that if the di-hydrostreptomycin is used over a long period the toxic effects are not apparent until some time after the drug has been used, while with the sulfate the undesirable reactions appear during the time the drug is being used, and use of the material may be terminated early before permanent changes occur.

The dose in children is 40 mg. per kilogram per day, divided into six equal doses. In severely ill patients a total 24 hour dose may be given at one time and, depending upon the severity of the condition, one may then follow with the calculated dose every four hours. For the child of three to five years 1 Gm. daily is sufficient.

The route of administration is intramuscularly and intrathecally. (Caution if used intrathecally: eighth nerve damage is more liable to occur.) The intramuscular route may also occasionaly cause eighth nerve damage. In bacillary dysentary streptomycin may be effectively given orally. The dose by this route is 100 mg. per pound per day.

Streptomycin in pediatrics is useful against bacillary dysentary, staphylococci, streptococci, gram negative bacilli, H. Influenzae, meningococcal infections, and urinary infections due to E. coli, proteus vulgaris, aer. aerogenes, b. Friedlander, and ps. pyocyaneus.

Streptomycin is useful in the treatment of tuberculosis. Di-hydrostreptomycin is given during the acute hematongenous stage, and then change to the sulfate. Over long periods it has been found that streptomycin is effective if given twice weekly rather than daily. The daily dose should be maintained during the acute stage[5 6].

Combined Penicillin and Streptomycin

1. Dicrysticin. This product has 300,000 units of procaine penicillin G with 100,000 units of buffered crystalline potassium penicillin G and one-half Gm. of di-hydrostreptomycin sulfate, for aqueous injection.

2. Combiotic. *P-S.* Each vial contains 300,000 units of penicillin G procaine, 100,000 units of penicillin G sodium buffered with sodium citrate and one Gm. of di-hydrostreptomycin sulfate.

These preparations are effective against both gram positive and gram negative bacteria. In very severely ill children where it appears that life is involved, one should give one whole vial of one of these preparations as the initial dose and then, by study, determine the best agent to use.

Aureomycin Hydrochloride

The recommended oral dose is 25 mg. per kilogram body weight daily. In severe illness the dose should be 50 mg. per kilogram body weight daily until the child begins to improve, and then the dose should be reduced to the first stated dose[2]. The intravenous dose is 10 to 15 mg. per kilogram body weight daily[7].

Aureomycin in pediatrics is useful against amoebic dysentary, rat bite fever, bronchitis of suspected viral origin, scarlet fever, bacillary dysentary, (but sulfadiazine or chloromycetin probably better), brucellosis[3], and Rickettsial infections; Rocky Mountain spotted fever and typhus fever.

It is evident from experience that in primary atypical pneumonia the morbidity may be shortened by the use of aureomycin but specific or sudden cures are usually not forthcoming in children, and this should be explained to the parents.

Aureomycin for intravenous use is available in 100 and 500 mg. ampules. It may be given in distilled water, normal saline, or five per cent dextrose solution. Ten cc. of the diluting fluid should be used with each 100 mg. of the aureomycin and given very slowly. It has been found in actual use that it is better to dilute 100 cc. of the diluting fluid to each 100 mg. of the aureomycin and this greatly reduces thrombophlebitis when used with children[2]. The larger dilutions should not be used with distilled water due to the danger of hemolysis.

Aureomycin should not be given intramuscularly. Also it should not be given by rectum because it may cause ulcer formation. Aureomycin at times causes nausea but do not give alkalis to prevent nausea because they decrease the effect of the aureomycin.[8] Aureomycin is best given to children mixed with honey, syrup or chocolate syrup. Spersoids, which is a chocolate flavored powder of aureomycin, may be mixed with milk or water.

Terramycin Hydrochloride

The recommended oral dose of terramycin is 50 mg. per kilogram body weight per day, and it may be given by mouth or intravenously. In pediatrics it is useful against pneumococcal infections, primary atypical pneumonia, Friedlander's pneumonia, influenza, urinary tract infections by susceptible organisms, gonococcus infections, bacillary infections, salmonella infections, typhus, amoebic dysentary, bronchitis (clinical), streptococcal infections, and pertussis.

Terramycin for intravenous use is available in 250 and 500 mg. sizes. This should be diluted with sterile water, five per cent dextrose, or normal saline so that the resulting amount will be at least 100 cc. final volume. The rate of injection should not exceed 100 cc. each five minutes. As with aureomycin, it has been found that in actual practice it is better to dilute 100 cc. of the diluting fluid to each 100 mg. of the product in order to reduce the incidence of phlebitis. The larger dilutions should not be used with distilled water because of the danger of hemolysis. Terramycin frequently causes nausea, vomiting, or diarrhea. When the above symptoms appear, one must discontinue the drug. Terramycin also is best given to children mixed with honey, syrup or chocolate syrup.

Chloromycetin

The recommended dose of chloromycetin is 50 mg. per kilogram body weight per day. It may be given by the oral, or the *rectal route*. When given rectally, the dose should be doubled, a pin hole made into each end of the capsule, a little vasline placed on the capsule, and with a finger cot inserted into the rectum. Chloromycetin in children causes less nausea than the other mycin drugs, and rarely causes diarrhea.

Chloromycetin in pediatrics is useful against primary atypical pneumonia, pneumococcal infections, infectious mononucleosis, paratyphoid fever, salmonella infections, shigella infections, gonococcus infections, pertussis, urinary tract infections by susceptible organisms, and Rickettsial infections, especially Rocky Mountain spotted fever.

There has recently been released an oral preparation for use for children which has great promise. This is Pediatric Chloromycetin Palmitate, each 4 cc. containing 125 mg. of available chloromycetin.

With the use of either the sulfa drugs or mold antibiotics for a long period of time multiple vitamins should be given[9]. In cases where there is doubt as to the response to a preparation, or in very severe illness, sensitivity to the various preparations should be determined by the laboratory.

Polymycin B Sulphate

Quite recently polmycin B has appeared for general use its chief use is against the bacillus pyocyaneus. It is very toxic when given intramuscularly causing albuminuria and neurotoxic changes. The oral method of administration apparently is safe because there is little absorption from the intestinal tract. Orally it is useful against shigella organisms.

Neomycin

Neomycin has become available lately and is useful for topical application against numerous bacteria. It is not to be used parenterally or orally because of toxicity.

Bacitracin

Generally speaking bacitracin is for local use only against alcaligenes faecalis, certain diphtheroids, Neisseria catarrhalis and intracellularis, sarcina flava, staphylococcus albus and aureus and streptococcus faecalis, hemolyticus (D) and viridans. This drug is not to be used parenterally at any time. This is the ground mold of penicillin and is used against the same bacteria as penicillin, but for local use only.

Antagonism of the Mycin Drugs and Penicillin

There has arisen a question as to whether the use of penicillin with any of the mycin drugs, *with the exception of streptomycin,* may cause an antagonistic effect so that the two in combination will be less effective than either one used alone.[10] The explanation of this phenomenon is suggested by Hunter[11] in that it may be that penicillin has been shown to kill only those organisms which are in the process of active multiplication. When another agent is present, like aureomycin or chloromycetin, that renders them static (inhibits but fails to kill), then the organisms are no longer killed by the penicillin. There is sufficient doubt cast upon the subject so that they should not be used together until further studies have been made.

Indicated Therapy for Common Pediatric Diseases

Considering the preceding information, the accepted usage of the materials under discussion in the treatment of the common pediatric illnesses is:

Pneumonia; penicillin and sulfadiazine.

Pyelitis; penicillin and diethanolamine or sulfadiazine. Streptomycin may be given in the same syringe with plain penicillin G at four to six hours intervals if hospitalized. If specific bacterial invasion has been determined by culture, the suitable antiagent should be used.

Influenzal meningitis; penicillin and sulfadiazine. Streptomycin, chloromycetin and aureomycin may

be helpful and should be considered in severe cases. Rabbit antibody serum may also be used.

Meningococcal meningitis; penicillin and sulfadiazine.

Pneumococcal meningitis; penicillin and sulfadiazine.

Typhoid fever; chloromycetin.

Amoebic dysentary; terramycin preferably[7] or aureomcyin.

Bacillary dysentary; (shigella infection)—sulfadiazine and chloromycetin.

Vincent's infection of the oral cavity; penicillin, locally and intramuscularly.

Impetigo; penicillin locally and if indicated, intramuscularly. Bacitracin also is useful for local application.

Rickettsial infections, Rocky Mountain spotted fever; aureomycin or chloromycetin.

Common upper respiratory infections; to prevent complications the physician should determine by the case in hand which agent should be used, if any.

Otitis media; penicillin, sulfa, or mycin in adequate dosage with careful observation until healing has occurred. With repeated attacks of acute otitis media or chronic otitis media, one should investigate the mastoids by roentgenogram to rule out infection.

Virus infections respond poorly to any medication and this should be explained to the parents at the onset. Some of the virus infections may be helped by one of the mycin products but the results are never certain.

Acute purulent tonsillitis; penicillin or diethanolamine or both.

Common cold; the treatment is symptomatic. With infants or small children who have fever accompanying the cold, one is warranted in giving penicillin, sulfa, or one of the mycins to help prevent complications such as otitis media, tonsillitis, mastoiditis, pneumonia, or bronchitis.

Infectious mononucleosis; chloromycetin? or aureomycin?

Influenza; the treatment is symptomatic. One may give penicillin, sulfa, or preferably one of the mycin drugs, to prevent secondary infection.

Newborn or premature infant in distress; penicillin and streptomycin. Under three pounds give penicillin 5,000 units, and if over three ponds give penicillin 10,000 units every eight hours. Streptomycin should usually be given with the penicillin when treating the infants in this category, the dose being 40 mg. per kilogram body weight per day, given in divided doses in the same syringe with the penicillin.

Erysipelas; penicillin. Sulfonomides may be used as adjunctive therapy.[3]

Acute infectious laryngotracheobronchitis (nondiphtheritic); combined antibacterials — penicillin, streptomycin and, if severe, one of the sulfa drugs or one of the mycin drugs.

Measles; to prevent complications, penicillin is the agent of choice.[3]

Pertussis; chloromycetin, terramycin, aureomycin.[3] Castelli and Goldchluk[12], with ten cases, found that chloromycetin was of help in pertussis. Booher, Farrell and West[13], in an evaluation of the comparative clinical effect of aureomycin, terramycin, and chloromycetin in the treatment of whooping cough, in 111 cases state that with the use of these agents the most noticeable observation was a substantial decrease in the whoop stage of the disease.

In my experience, the antibiotics may help to shorten the disease as to severity but not duration. It is believed that this may be due to decreasing the secondary infections that accompany pertussis. It is stated that as to the present information, one should certainly with infants and small children give one of the hyperimmune pertussis antiserums first, and then give a mycin drug if deemed necessary. For infants with pertussis the hyperimmune pertussis antiserum usually is a specific and may be life-saving.

Friedewald[14] states that it is difficult to evaluate the results obtained in pertussis with the antibiotics. The children continue to have the paroxysms and the course remains little changed.

Anterior poliomyelitis; none.

Scarlet fever; penicillin.[3] Sulfadiazine may also be very helpful.

Tetanus; penicillin and tetanus antiserum.

The duration of treatment varies with the etiology or the severity of the disease. As a rule, in office or home practice the agents are used until the active phase of the disease is passed, and then continued for a short period varying with the condition being treated. In the more serious illnesses such as pneumonia, pyelitis, meningitis, typhoid fever, amoebic dysentary, bacillary dysentary, Rickettsial infections and otitis media, the medication should be continued until the patient is considered cured by laboratory or clinical methods.

Conclusion

As accurately and as briefly as possible, the optimum usage of the sulfa drugs and mold antibiotics in pediatrics is presented.

REFERENCES

1. Rauber, Albert: Personal communication.
2. Walker, Mary: Personal communication.
3. Report of the Committee on Immunization and Therapeutic Procedures for Acute Infectious Diseases of the American Academy of Pediatrics, 1951.
4. Elias, W., Price, A. N., and Marrion, H. J.: N, N[1]—Dibenzylethylenediamine Penicillin. Philadelphia, Penicillin Division, Wveth Incorporated and Department of Internal Medicine, Jefferson Hospital, 1951.
5. Perkins, George E.: Personal communication to the author.
6. Hobby, A. Worth: Personal communication to the author.
7. Patterson, Joseph: Personal communication to the author.
8. Review of Aureomycin; Lederle, 1951.
9. Gay, T. Bolling; Personal communication to the author.
10. Keefer, Chester S.: Evaluation of Antibiotic Therapy, Postgrad. Med. 9:103-4 (Feb.) 1951.
11. Hunter, T. H.: Speculations on the Mechanism of Cure of Bacterial Endocarditis, J.A.M.A. 144:519, 1950.
12. Castelli, Armando J., and Goldchluk, Miguel: The Use of Chloromycetin in Whooping Cough, La Prensa Medica Argentina, 38:503 (March) 1951.
13. Booher, Craig.; Farrell, James B., and West, Edward J.: Pertussia. Clinical Comparison of the Newer Antibiotics, J. Pediat. 38:411 (April) 1951.
14. Friedewald, William F.: Personal communication to the author.

ROBERT F. MABON, M.D., Atlanta

Management of Acute HEAD INJURES

The prime consideration in all head injuries is, of course, the nature and extent of actual brain damage and the proper treatment to employ. This can best be evaluated by a careful physical and neurological examination, paying attention to the particular signs which give an experienced observer the clues to the degree of cerebral trauma and the best measures to use. If available, a careful history will also help in outlining the proper form of treatment.

Shock is not a characteristic feature, *per se,* in uncomplicated cases of head injury. If present, one should ascertain if there may be some other cause, such as hemorrhage resulting from internal injuries, either of the chest or abdomen, if there is no visible hemorrhage to account for the shock.

One should then proceed systematically with a careful examination. The depth of unconsciousness should be noted, and pertinent questions as to whether the patient was more or less alert in the interval before being seen, and if unconscious, of what duration this period of unconsciousness. Motor activity should be evaluated, i.e., weakness or complete paralysis of one side of the body. Occasionally, it may be necessary to use painful stimuli, for example, supraorbital pressure, to determine if there is a hemiparesis or hemiplegia. Asymmetrical facial grimacing may indicate a central or peripheral type of facial paralysis. Bilateral involuntary extensor rigidity of upper and/or lower extremities leads one to suspect stem damage which is usually an irreversible process.

The major tendon reflexes of both the upper and lower extremities should be elicited. Increased reflexes, usually lateralized to the side of greater weakness as compared with those of the opposite side, help in localizing the intracranial damage. Depressed abdominal reflexes will be an accompanying feature suggestive of contralateral cerebral injury. Most often, particularly in the severe injuries, the abdominal reflexes cannot be elicited and when present suggest a more mild head injury with improved prospects of recovery. Of course, the classical pathological toe signs, namely, the positive Babinski response, as well as the other associated signs which elicit extension of the big toe, and the positive Hoffman sign in the upper extremity, are valuable in localization. If complete flaccidity is encountered with arreflexia in all four extremities, one should be alert to the possibility of a cervical fracture-dislocation with concomitant cord damage.

Examination of the pupils and the pupillary reactions is essential. A unilateral dilated pupil, which is totally unresponsive or sluggishly responsive to light, should make one suspicious of an ipsilateral intracranial hemorrhage, particularly an epidural or extradural hematoma. If this phenomenon is present bilaterally one should suspect grave and probably irreversible cerebral damage. Miotic, unresponsive pupils are sometimes indicative of brain stem trauma. In the early period, that is, within the first twenty-four to thirty-six hours, funduscopic examination is of little value in determining the amount of intracranial damage or evaluating the degree of posttraumatic cerebral edema. Since this is the case, mydriatics should rarely be used for study of the fundus for early signs of increasing intracranial rension, for the pupillary reactions may be thus disturbed and they may be of the utmost importance in the subsequent observation of the patient. Later, however, ophthalmoscopic examination can be of value in determining the future course as well as the response to the outlined therapeutic regime.

In the presence or absence of an associated scalp laceration it is important to inspect carefully the scalp to determine if there are any localized areas of swelling or induration. Occasionally, in a deeply comatose patient, edema or swelling may help to decide whether or not we are dealing with intracranial pathology, secondary to trauma, where no history is available and there are no focal neurologic signs.

An example of this is a twenty-three year old colored male who was admitted to the hospital in a deeply comatose state with a history of having been found lying unconscious in a railroad yard.

Examination of the patient revealed him to be deeply comatose, not responding to any of the usual forms of painful stimuli. One could not elicit any of the deep or superficial reflexes and there was a complete flacidity of all four extremities. No evidence of a Babinski sign could be uncovered. Both pupils were miotic but equal and did not react to light. In the right parietal area there was a small area of induration and minimal swelling.

The patient was observed closely for a period of several hours and then it was decided to carry out trephination. A trephine opening was placed in the left temporal region in the usual fashion and no evidence of an extra or subdural hematoma was encountered. However, upon making a trephine opening in the right temporal area there was evidence of a blood clot around the edge of the burr hole. An opening was made into the dura and no subarachnoid or subdural bleeding was found. The dura was then

closed. The burr hole was enlarged inferiorly toward the right temporal lobe and a very large hematoma, about 4 cm. thick, covering the right parietal and temporal lobe, was found. This was evacuated and proved to have originated from two bleeding points, venous oozing from the middle meningeal vascular channels and a second briskly bleeding point from a tear in the transverse sinus.

After operation the patient recovered consciousness within a few hours and made an uneventful recovery.

Examination of the mastoid region is important because an ecchymotic discoloration in this area, the so-called Battle's sign, is frequently associated with a basilar skull fracture. In keeping with this, a sanguinous or sero-sanguinous aural discharge is also consistent with a fracture of the base of the skull. Inspection of the ear drum in the absence of a watery or bloody discharge from the external auditory canal will sometimes uncover an intact, but bulging drum, dark and discolored, indicative of a retro-tympanic hemorrhage. This, too, when present, suggests a basilar fracture.

The vegetative signs are also of great importance in the examination, particularly in the establishment of a baseline in those instances in which observation of the course of the patient and symptomatic therapy have been decided upon. Very often in the initial examination of a severe head injury one will find considerable fluctuation in the various vital signs, but, usually, these will become stabilized after several hours and then variations or excursions will be of greater significance. The depth, frequency, and rhythm of the respirations should be noted. When Cheyne-Stokes breathing occurs the prognosis is correspondingly guarded because few patients with this type of respiration will recover. The blood pressure and pulse very often mirror the degree of post-traumatic cerebral edema. An elevated or climbing blood pressure associated with a slowing pulse is suggestive of increasing intracranial tension. A rapid, thready pulse may be found with progressing failure of the vital medullary centers. The temperature is of value because an uncontrollable rise in the temperature gradient is characteristic of severe damage to the thermoregulatory center with a correspondingly poor prognosis.

Specific Treatment

The establishment of an adequate airway is of primary importance. The usual method of aspiration of various secretions of the naso-pharynx and laryngeal region will suffice in many cases but, in others, more radical measures have to be employed. It is not generally realized that long before cyanosis appears the patient may be hypoxic. Kubicek, et al, have stated that "Where cyanosis is first visible, the flow of oxygen from capillary blood to nerves may be reduced by at least 65 per cent."[1] In a patient with a severe head injury, the function of the vital cerebral centers are already handicapped by the local congestion, edema, and, in some instances, actual hemorrhagic extravasation. The range of optimal and minimal oxygen consumption is quite limited and, consequently, very little in the way of oxygen deprivation can be tolerated by these delicate cells. Therefore, it behooves one, in the presence of labored respirations, when it is important to establish a satisfactory airway, to perform a trachectomy early in the course of treatment.[2] It is amazing, in some instances, to see how this single procedure will allay extreme restlessness and improve startlingly what appears to be a very critical situation.

The posture of the patient is also of importance. The Trendelenberg position will, of course, facilitate the drainage of secretions from the respiratory passages but, on the other hand, it will promote cerebral congestion and edema by the impairment of the venous return from the head. Flat bed rest, with the patient on his side to prevent the tongue's falling back into the oral cavity, or, occasionally, a semi-Fowler's position will be the one of choice.

One of the major problems of treatment is to control the extreme restlessness which very often is present. One should, of course, erect side boards to prevent the patient's falling out of bed. Restraints may, on occasion, be necessary but one should be aware that some comatose patients subconsciously fight restraints and that they should not be used routinely but only when indicated.

The form and method of administration of sedation is of paramount importance. A good axiom is to never use any of the opiates or related drugs which have similar properties. Morphine will constrict the pupils, preventing accurate follow-up observation of pupillary changes, depress the respiratory centers, have an adverse effect on the cerebrospinal fluid pressure, and is also a cortical depressant. Any drug which has any of the pain and anxiety allaying properties of morphine will have the same adverse effect on the damaged central nervous system that morphine does and should not be used. Barbiturates are of great value in controlling these patients. Sodium luminal, e. g., can be administered easily parenterally and has proved to be very helpful in these excitable, irritable patients. One must bear in mind, however, that there are occasional patients who tolerate barbiturates poorly and this group of drugs may have a prolonged effect which will mask important signs when a patient is being watched for suspect intracranial hemorrhage which can be relieved by surgical measures. Paraldehyde rarely has any of the undesirable features of the barbiturate group of drugs and it, too, can be administered by several different routes. Many feel that it is unquestionably the drug of choice in the management of this group of patients. Very rarely, with the patient who is almost maniacal as a result of the cerebral trauma, sodium amytal or sodium pentothal will have to be given intravenously.

Marked temperature elevation can be controlled by the oral or, if necessary, rectal administration of Aspirin or other anti-pyretic drugs. Occasionally, it will be necessary to resort to the use of tepid sponge baths and other similar methods for combating hyperthermia.

The trend recently has been away from the use of hypertonic fluids in the therapy of cerebral edema. The only substance which may be of value in relieving this common complication is intravenous serum albumin.[3] However, the efficacy of this preparation is not too certain and it is inordinately expensive which precludes its use routinely.

There has been in the past, and even now, a vogue toward the use of dehydration of this type of patient. Certainly, low fluid intake for the first twenty-four hours will have little deleterious effect since the patients are usually fairly well nourished and hydrated prior to the accident, although there may be some doubt as to the salutary influence of this measure on cerebral edema. It is not unusual to see patients who appear quite intractable and un-cooperative, after a day or two of dehydration, become more quiet and improved in all respects following the administration of fluids intravenously. Generally speaking, a good rule to follow is to attempt to maintain a physiological intake, enough to establish a urinary output of between 1200 cc. to 1500 cc. daily.

It is manifestly impossible to maintain a patient for any length of time on parenteral fluids so that after several days, if still unconscious or semi-stuporous, it is well to supplement the requirements by tube feedings, consisting of a high-protein, high-caloric, high-vitamin liquid diet. A good plan is to feed the patient every three hours, approximately 250 to 300 cc. at each feeding by tube, and remove the tube after the last feeding at 2:00 a. m., giving the patient a rest, and re-inserting the tube in the opposite nostril at 8:00 a. m. of the same morning. This can be continued indefinitely.

An eighteen year old girl was in an automobile accident on July 10, 1950, and was rendered unconscious, obviously with a massive brain injury. There was some question initially as to whether or not this patient would survive the immediate effects of the head injury. She had a marked paresis of the left upper and lower extremities. The patient continued, however, to do satisfactorily. Her vital signs stabilized and it was necessary to keep her on tube feedings. These feedings were instituted within a period of several days after her injury and were continued until she first roused from her stuporous state on Sept. 3, 1950, approximately seven weeks after the original injury. She was maintained during this period in an excellent state of nutrition by the supplementary feedings. The patient subsequently made an uneventful recovery and the only residual at the present time is a somewhat facetious attitude and mildly impaired judgment.

It is needless to say that whenever a patient is being observed for a possible complication, that frequent charting of the blood pressure, pulse, temperature, respirations, state of the pupils and the pupillary reactions, as well as any change in the neurological status and other localizing factors, such as focal or generalized convulsions, is imperative.

It is not necessary to use cerebro-spinal fluid examination routinely. Usually there is enough objective evidence without this procedure to evaluate accurately the patient's condition and the proper regimen to employ. It should never be used in the presence of an otorrhoea or rhinorrhoea, since there is likelihood of provoking an infectious meningitis by establishing a negative pressure. If performed in cases of head injury, the Queckenstedt test is definitely contraindicated since further damage may result. The initial pressure, however, should always be noted as well as the final pressure. Delayed spinal puncture is of great value in the presence of persistent headache, nausea and vomiting, although the general progress is otherwise satisfactory. It is amazing to see how the removal of a relatively small quantity of cerebro-spinal fluid, which may be deeply xanthrochromic, will be the turning point in the patient's subjective improvement. It is difficult to understand, from a physiological standpoint, how the removal of 10 to 15 cc. of spinal fluid will accomplish this, but it happens often enough to justify the opinion that it is not merely coincidence.

A sixty-five year old male was struck by a trackless trolley on Jan. 26, 1951. He was unconscious for an indefinite period of time, probably a matter of fifteen to thirty minutes. Since the accident, although hospitalized, he had had quite severe headaches with vertigo. X-rays of the skull were within normal limits.

When first seen, on Feb. 1, 1951, six days after the accident, his headaches had become progressively worse, so much so that he was requiring very heavy sedation, particularly at night, to take care of his discomfort.

Examination was essentially within normal limits as far as the neurologic picture was concerned. A lumbar puncture was performed at the time of the initial examination and it was noted that the initial pressure was 380 mm. of water. The cerebro-spinal fluid was definitely xanthochromic. A total of 15 cc. was removed. Following this single puncture the patient showed marked improvement and within several days he was quite free of headaches and discharged from the hospital on Feb. 10, 1951. He continued to have an uneventful convalescence, with no return of his head discomfort.

Skull films should not be considered a necessary routine. More often than not, the patient is exceedingly restless, irritable, even unmanageable, and, under such conditions, good skull films are difficult to obtain. Of course, in cooperative patients they may be of value but, in the majority of instances, they are most unsatisfactory. It is rare that one is unable to determine from the examination and course of the acutely injured patient what treatment to employ that would be materially altered by positive findings in the skull films.

Otorrhoea is best treated by intelligent neglect. A sterile cotton ball, saturated with 70 per cent alcohol, should be lightly placed in the external auditory canal but never too tightly, so as to tamponade and dam up the secretions. In some instances, when the flow is excessive, an ordinary mastoid dressing will prove valuable. Usually, otorrhoea will subside spontaneously and will not need definitive treatment.

Rhinorrhoea, on the other hand, is a much more

serious complication and, if it persists, will require surgical measures to stop the flow.[4] This may be done when the condition of the patient permits and after a week or two of conservative therapy has been tried without success.

The use of antibiotics and sulfonamides should be mentioned. In all cases of otorrhoea and rhinorrhoea these preparations should be an important part of the treatment. Usually, the regular routes of administration and optimum quantities of the antibiotics suffice. However, when one suspects that there may be a fracture into one or more of the accessory nasal sinuses, sulfadiazine should also be used, since in some instances the antibiotics have seemed to be ineffective in preventing a spreading basilar meningitis which is usually pneumococcic in character if a fracture in this area is the source of infection.

Recognition and Treatment of the Usual Surgical Complications of Acute Head Injuries

Extradural Hematoma

This is an infrequent complication of head injuries occurring, according to statistics from the large clinics, in 3 to 5 per cent of all cases of cerebral trauma.[5,6] The classical picture is usually described as one of an initial period of unconsciousness, followed by a lucid interval, in turn followed by unconsciousness. Actually, the classical picture occurs infrequently. In the majority of instances one may find the initial period of deep coma or semi-stupor, followed by an interval in which the patient may respond but still poorly, mumbling unintelligible answers to questions, e.g., or grasping weakly the examiner's hand when requested to do so, then gradually lapsing again into the deeply comatose state. In other words, one may be confronted more frequently with an alteration in the state of consciousness rather than the clear cut clinical picture usually depicted.

There are other signs which are pathognomic of this condition. A unilateral dilated pupil which is unresponsive to light is a very common feature of this syndrome and occurs in at least 50 per cent of cases. Hemiparesis or even, occasionally, hemiplegia, with the accompanying hyperflexia and pathological toe signs, is found in about 50 per cent of cases. If it is possible to obtain satisfactory skull films, a fracture across the middle meningeal vascular channels is an impelling reason to consider surgical intervention. Should there be calcification of the pineal gland a lateral shift in the artero-posterior view should make one strongly suspect this complication.

Treatment is evacuation of the hematoma and, in every instance, bilateral trephination should be performed because bilateral extradural hematomas, although comparatively infrequent, do occur. The mortality rate is still high for this condition, approaching 50 per cent. The reasons for this are (1) lack of early recognition, (2) delay in surgical intervention, and (3) the severity of associated cerebral trauma.[7]

Occasionally, one will find an extradural hematoma with a prolonged interval from the time of the injury until the lesion is uncovered at operation and usually when this is the case trephination is performed in the expectation of finding a chronic subdural hematoma.

A male patient, age 36, was admitted to the hospital on June 19, 1948, with a police record of having been found unconscious on the street at 3:15 A. M. On admission, the patient was semi-comatose and resisted violently all attempts at examination. The pupils were round and equal and reacted to light. The reflexes were physiological except for a doubtful Gordon sign bilaterally. Later that same day the patient was stuporous but belligerent and uncooperative during examination. The pupils were again noted to be round and equal and reacted well to light and the remainder of the neurological examination was within normal limits. On June 21 the pulse was 56 and the blood pressure was 130/74, the patient was much more alert but disoriented as to time, place, and date, and had a slurring type of speech. The pupillary reactions were still normal. The optic discs were noted to be very pale with indistinct margins. There was an equivocal Babinski response on the left. On June 22, the patient was more lucid but still drowsy. The Babinski sign was more definite on the left. On June 24 the patient was markedly improved. X-rays revealed a basilar fracture on the right, radiating through the parietal bone. On June 28, 1948, temporal burr holes were made in the expectation of finding a chronic subdural hematoma and a large right extradural hematoma was uncovered and removed. The hematoma measured in depth ¾ to 1 inch and covered most of the right parietal lobe. The patient made an uneventful recovery and was discharged from the hospital on July 7, 1948.

This is an example of a chronic or delayed epidural hematoma being uncovered nine days after the injury was incurred. There are reported instances, of course, where a much longer period of time elapsed between the injury and operative removal. The interval in one reported case was thirty-five days.

Acute Subdural Hematoma

This complication occurs more frequently than the epidural hematoma. The signs may be, and usually are, quite similar to those of the latter condition and, of course, bilateral trephination should be performed. However, the mortality rate is exceedingly high, ranging from 60 to 90 per cent, since the frequency of associated cerebral trauma is high.

Cranio-cerebral Wounds

Compound, depressed fractures of the skull and penetrating wounds are emergency procedures to the extent, however, that the patient's general condition will permit surgery. Adequate debridement and definitive reparative measures should, of course, be employed.

Scalp Wounds

Scalp wounds, *per se,* should never be handled carelessly. It is a great tragedy to see a scalp wound that has been treated casually, sutured without any attempt at having the adjacent area shaved and satis-

factorily prepped, or poorly approximated, develop a virulent infection and subsequently a spreading osteomyelitis of the skull, brain abscess, etc. Very many scalp wounds have bruised, irregular, ragged edges with buried detritus, hair, etc., within the wound depths. Careful and adequate prepping is of the utmost importance. Gentle cleansing of the wound, debridement, and excision of the bruised and devitalized tissues, and careful approximation, under strictly aseptic conditions, is the soundest treatment. Inspection of the underlying bone is of value also since small depressions may be noted in this fashion. But, again, it should be emphasized that these wounds should be managed with the utmost care and respect even though they may appear to be a minor complication.

Summary

In summary, then, an attempt should be made in each case of acute head injury to individualize the patient's care instead of attempting to follow some fixed routine, to determine, first, by close observation and examination, if surgical intervention is indicated. Secondly, if symptomatic treatment is the choice of action, to attempt, as closely as possible, to provide a regimen which will maintain, or approach, the normal physiologic state.

References

1. Kubicek, W. G.; Holt, G. W., and Kottke, F. J.: Physiology of Respiration as Applied to Treatment of Bulbar Poliomyelitis, Arch. Phys. Med. 29:84-88, 1948.
2. Echols, D. H.; Llewellyn, R.; Kirgis, H. D.; Rehfeldt, F. C., and Garcia-Bengochea, F.: Tracheotomy in the Management of Severe Head Injuries. Surgery 28:801 (Nov.) 1950.
3. Gates, Edward M., and Craig, W. McK.: The Use of Serum Albumin in Cases of Cerebral Edema, Preliminary Report, Proc. Staff Meet., Mayo Clin. 23:89-93 (Feb. 18) 1948.
4. Adson, A. W., and Uihlein, A.: Repair of Defects in Ethmoid and Frontal Sinuses Resulting in Cerebro-spinal Rhinorrhoea, Arch. of Surg. 58:623 (Jan.-June) 1949.
5. Kennedy, Foster, and Wortis, Herman: Acute Subdural Hematoma and Acute Epidural Hemorrhage, Surg. Gynec. & Obst. 63:732 1936.
6. Munro, Donald, and Maltby, George L.: Extradural Hemorrhage, Ann. Surg. 113:192 1941.
7. Segerberg, Ludwig, and Spurling, R. Glen: Acute Craniocerebral Trauma, J.A.M.A. 141:371 1949.

PRESS COMMENT:

Victims Get Fine Treatment

A few orchids are due the local doctors and hospital staffs for the excellent manner in which they took care of the 40 persons brought to the three local hospitals for treatment following the accident in which one loaded bus and five automobiles figured near here Sunday evening.

Forty patients, all at once, constitutes a pretty big order for a large hospital. But when they are brought to three small hospitals, such as those here, it takes a great amount of efficiency and cooperation to handle the situation.

But doctors and technicians were on the job in short order; the nurses responded quickly and there was a minimum of confusion, despite the large number of patients and the many visitors at the hospitals. Expert care and attention were given the injured.

Not only did the professional members of the hospital staffs function quickly and efficiently, but there were several volunteers among the citizenry who rendered much assistance in getting the injured to the hospitals and in doing small errands at the hospitals.

Fortunately there were no fatalities and indications are that there will be no permanent injuries, despite the seriousness of the accident.

—Americus Times-Recorder

Opposes Compulsory Insurance

The American farmer has been a strong factor in preventing adoption of compulsory health insurance in this country. A recent editorial in the *Christian Science Monitor* called attention to the strong opposition the farmers of the nation have voiced against compulsory health insurance.

"Opposition to the introduction of government health insurance in the United States is intensifying in agriculture," the *Monitor* said. "The biggest of the farm organizations, the American Farm Bureau Federation, with a membership of 1,452,000 families, recently reiterated its hostility. The Farm Bureau's annual convention adopted a resolution declaring: 'We oppose any form of compulsory health insurance.'

"Similarly, the National Grange, oldest and second largest of the farm bodies, at its convention a short time previously voiced again its stand against any plan of national compulsory health insurance or socialized medicine . . .

"Rural rejection of government health insurance has been little recognized in larger cities, which usually hear more of a labor's viewpoint. But through labor's call for compulsory health insurance has been much better publicized, it remains the demand of a minority . . . Meanwhile agriculture provides a balance against labor on this issue and a formidable safeguard."

A majority of the individual American citizens, we believe, are opposed to any form of compulsory health insurance. They may not be as vocal as some of the organizations which are calling for some such plan, but the opposition is there just the same.

Health insurance is a great thing, but there are plenty of sound companies offering this protection on a safe and sound basis. This is no field for the government. We already have too many government agencies and regulations.

—Valdosta Times

Special Articles

APPOINTMENTS

in the State and Local Civil Defense

VOLUNTEER MEDICAL SERVICE CORPS

EDGAR M. DUNSTAN, M.D., Atlanta, *Chairman*

Medical Civilian Preparedness Committee, Medical Association of Georgia

The Professional and Technical Assistance Phase of the Georgia Civil Defense Health Service Plan, as outlined in the overall plan published in the January issue of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA, is built around the State and Local Civil Defense Volunteer Medical Service Corps (C.D.V.M.S.C.), with existing hospitals as the core. The composition of the different units of these Corps is shown in the chart below.

It is assumed that all physicians, dentists, nurses, and other related professional and technical groups, will automatically volunteer for emergency service in the Local C. D. V. M. S. C., under the direction of the local civil defense director and his director of the civil defense health service division. It is thus recommended: that all of this personnel be assigned to the different units of this Corps; that the commanding officer of this Corps be the director of the local civil defense health service division; that the deputy commanding officers of the Corps be the deputy director of this division and the assistant director in charge of the medical services; that the staff of this Corps be the staff of the local civil defense health service division; and that the records of the Corps be kept up to date by the local Chief of Casualty Evacuation.

The State C. D. V. M. S. C. will be selected from local communities throughout the State and will operate wherever needed. The members of the State Corps will be subject to orders from the State Director of Civil Defense Health Service, Dr. T. F. Sellers, who will be the Commanding Officer of the Corps. Dr. Lester M. Petrie is the Deputy Director of the Civil Defense Health Service Division (C. D. H. S. D.) and Deputy Commanding Officer of the Corps. In the event of disaster, members of the State Corps may be directed to report for duty wherever needed in any locality in this State or in adjoining states. In whatever locality they may be assigned, they will place themselves under the direction of the local civil defense director and his health service deputy. The Staff of the Corps is the same as that of the C. D. H. S. D., and the Chief of Staff of the Corps is the Assistant Director in charge of the Medical Services. The records of the Corps are kept up to date by the State Chief of Casualty Evacuation and his secretarial staff. Not over 50 per cent of the medical personnal in any community will be called

for service in this Corps, since it is vital that there be enough personnel left to take care of the local needs and the evacuses which will be sent in.

It will be seen that the personnel assigned to the State C. D. V. M. S. C. have dual responsibilities as members of the State and Local C. D. V. M. S. C. There is no conflict, however, for the State will not call out the local components of a community suffering a major disaster. Furthermore, as stated above, State C. D. V. M. S. C. Units when ordered to duty in a stricken community will report to the Commanding Officer of the Local C. D. V. M. S. C., and will remain under his direction until released.

Initial assignments to the State and Local C. D. V. M. S. C. should be made at the same time for obvious reasons. The nominating committee should be composed of the local assistant director in charge of the civil defense medical service, his chief of casualty evacuation service, the respective regional public health director, and the civil defense chief of staff of the local hospital concerned. These nominations are submitted to the Executive Boards of the hospitals concerned as indicated, and then presented for final approval to the staffs of the State and Local Civil Defense Health Services Divisions.

To expedite these appointments, the State Chief of the Casualty Evacuation Service, or his representative, will represent the State C. D. H. S. D. directly in the case of nominations for these Corps in the Atlanta Metropolitan Area.

Hospital staffs throughout the State are thus urged to appoint their civil defense chiefs of staff as soon as possible. In addition, he may be, if desired, the chief of the medical or surgical civil defense service of his hospital. He will direct his staff during an emergency and coordinate activities with its improvised hospital system under the general direction of the local civil defense director of medical services and his staff. The Clinical Staff Organization for Disaster will go into effect immediately after an emergency is declared.

In the case of physicians who are members of several hospital staffs, care should be taken to avoid duplication and individuals concerned should be given the opportunity to express their preference as to which staff they prefer to serve with for civil defense purposes.

The State Chief of Casualty Evacuation has in his files up to date lists of the staffs of practically all the hospitals in the State. Copies of these are being made available to Regional Public Health Directors to expedite these appointments. The roster of all appointed units of the State C. D. V. M. S. C. will be prepared in at least six (6) copies, so that the central office and the five public health regions will have complete duplicate records of the statewide components.

The Georgia Civil Defense Health Service Plan above mentioned also outlines how the improvised hospital system in the schools will operate. These will be staffed by the school district personnel under the direction of the Parent-Teacher Associations with the school staffs and will constitute the Self-help and Neighbor-help Phase of the Plan. The grammar schools will be grouped around their respective high schools, which will be equipped more elaborately, and these in turn will be affiliated with definitely assigned existing hospitals. The improvised hospital system for each existing hospital will be arranged from the center outward to the periphery of the cities to insure that at least the peripherial improvised hospitals can continue operating even if the parent hospital is destroyed. These parent hospitals will thus provide the professional and technical assistance necessary for training and operations of the whole improvised hospital system in the schools. Since the State Parent-Teacher Association has already accepted the responsibility for the Self-help and Neighbor-help Phase of the program, it is urgent that the C. D. V. M. S. C. Units be appointed as soon as possible to furnish the professional and technical guidance needed. The first Monday in June has been set as the goal for completion of these appointments since this is the date for the first monthly meeting of the Civil Defense Health Service School which will initiate the intensive joint training program.

To illustrate how these appointments can be expedited, we have chosen the Atlanta Metropolitan Area as an example, simply because it is the largest in the State and thus presumably raises the greatest number of problems. Here, Drs. Charles Eberhart, A. E. Hauck and Richard Wilson, or his representative, could confer with the Civil Defense Chief of Staff of each general hospital, make the initial nominations for the State and Local C. D. V. M. S. C., and have these approved in the manner indicated.

The general hospitals in this area are: Emory University Hospital, Georgia Baptist Hospital, Piedmont Hospital, Crawford W. Long Hospital, St. Joseph's Infirmary, Grady Hospital, and the Kennestone Hospital in Marietta. Specialized and Veterans Administration Hospitals and private schools will be listed as assisting the basic hospitals in their respective areas. The Georgia 1951-52 Educational Directory gives the names of all the schools in the State and consultation with the local personnel concerned can readily group these into high school districts with their affiliated grammar schools, which has been done as shown below.

Order of Selection: Consult the organization chart closely. The following order of selection is suggested:

1. Select the basic staff of the parent hospital.
2. Next, select the units having state and local C. D. V. M. S. C. responsibilities as follows:
   a. Select a medical-surgical unit for each affiliated high school improvised hospital. If it is found that there will not be sufficient personnel to accomplish this, begin by appointing a skeleton high school training unit. These should, of course, be brought up to full strength before being sent out on statewide missions.
   b. Consult the State and Local Chiefs of Obstetrical Services and select the professional staffs of the five welfare non-casualty evacuation centers, one for each public health region headquarters. Atlanta should perhaps plan initially to set up one of these units and two skeleton units which could be brought up to full strength as needed.
   c. Select the Consultant and Special Groups pool as shown. This will constitute a reserve to be used as needed throughout the State.

STATE C.D.V.M.S. CORPS

Reserve Pool: Affiliated Medical-Surgical Unit for High School Improvised Hospital

1	Chief of Medical Services
1	Assistant Chief of Medical Services
2	General Internists
1	Chief of Surgical Services
1	Assistant Chief of Surgical Service
3	General Surgeons
1	Orthopedic Surgeon
1	Oral Surgeon
1	Pathologist
1	Radiologist
1	Ophthimologist
2	Anesthetists
8	Operating-room Nurses
6	General Duty Nurses
28	Nurses' Aides
2	Laboratory Technicians

Additional, If Available

1	Urological Surgeon
1	Plastic Surgeon
1	Thoracic Surgeon
1	Neuro Surgeon
1	Supply Officer

COMMANDING OFFICER: The Director of C, D, H, S.
DEPUTY CO: The Deputy Director of C, D, H, S.
CHIEF OF STAFF: The Director of Medical Service Branch of C, D, H, S.
STAFF: The same as the staff of the C, D, H, S.

Reserve Pool: Skeleton Training Unit for High School

1	Internist
1	Surgeon
1	Oral Surgeon
2-4	Nurses
4-8	Nurses' Aides

Reserve Pool: Special Teams* (Typical)

1	Captain
1	Assistant
1	Nurse
1	Nurses' Aide

*See C.D. Hospital Organization for Disaster for kinds of Teams.

Reserve Pool: Mobile First Aid

9-12	Physicians
3	Dentists
3	Nurses
2	Pharmacists
15	First Aid Workers & Nurses' Aides
6	Clerical Assistants
150	Litter Bearers (3 battalions-50 each)

Reserve Pool: Professional Staff of Non-Casualty Welfare Evacuation Centers

4	Obstetricians
1	Pediatrician
1	Interoist
1	General Surgeon or Gynecologist
0-1	Psychiatrist
1-2	Dentists
2-4	Anesthetists
17-28	Nurses
9-14	Nurses' Aides
2	Laboratory

Reserve Pool: Skeleton Training Unit for Non-Casualty Welfare Evacuation Centers

1-2	Obstetricians
1	Pediatrician
1	Physician
1-2	Dentists
2-4	Nurses
4-8	Nurses' Aides

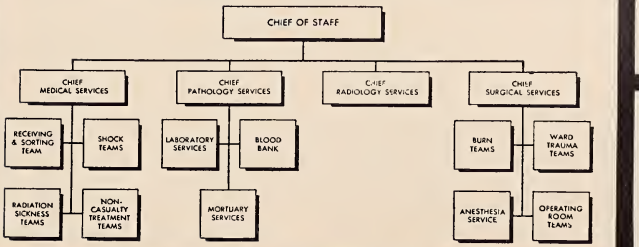
Reserve Pool: Consultant and Special Groups

Anesthesiology
Dermatology & Syphilology
Internal Medicine
Neurological Surgery
Obstetrics and Gynecology
Ophthalmology
Orthopedic Surgery
Otolaryngology
Pathology
Pediatrics
Physical Medicine
Plastic Surgery
Preventive Medicine and Public Health
Proctology
Psychiatry and Neurology
Radiology
Surgery
Thoracic Surgery
Urology

Dentists
Dietitians
Druggists
Lab Technician
Litter Bearers
Medical Corpsmen
Medical School Technician Pool
Osteopaths
Physicists
Physiotherapists
Private Nurse Group
PH Nurse Group
Radiation Monitors
Veterinarians
X-ray Technician
Other Health Professions

HOSPITAL ORGANIZATION FOR DISASTER

CLINICAL SERVICES • MEDICAL STAFF



Reserve Pool: Professional Staff of Parent Hospital

The same organization as for State Affiliated Medical-Surgical Unit for High School with the following additions, if available:

1	Dermatologist
1-2	Obstetricians
1	Otolaryngologist
1	Pediatrician
1	Physical Medicine
1	Proctologist
1	Psychiatrist

*Units below have dual functions and, therefore, are the same as shown for the State C.D.V.M.S.C.

LOCAL C.D.V.M.S. CORPS

Reserve Pool: Grammar School Professional Staff (150-bed capacity)

4	Physicians
2	Dentists
6	Nurses
20	Nurses' Aides
8	Corpsmen
2	Laboratory

COMMANDING OFFICER: The Director of the Local C, D, H, S.
DEPUTIES: The Deputy Director of the Local C, D, H, S.
The Director of the Local Medical CD Branch
STAFF: The Same as the Local C, D, H, S.

Reserve Pool: Affiliated Medical-Surgical Unit for High School Improvised Hospital

Reserve Pool: Professional Staff of Non-Casualty Welfare Evacuation Centers

Reserve Pool: Skeleton Training Unit for Grammar School

1-2	Physicians
1-2	Dentists
2-4	Nurses
4-8	Nurses' Aides

Reserve Pool: Local CD Control Centers

All Health Service Personnel not otherwise assigned will report here in case of disaster. There will be a Regulating Officer who will give them specific assignments as indicated.

Reserve Pool: Skeleton High School Training Unit

Reserve Pool: Skeleton Training for Non-Casualty Welfare Evacuation Center

Reserve Pool: Special Teams (Typical)

Reserve Pool: Mobile First Aid

Reserve Pool: Consultant & Special Groups

ORGANIZATION CHART

d. Select the State C. D. V. M. S. C. special teams. These will be used to augment parent hospital staff, in the improvised hospital system, or for statewide missions. The typical team is organized as depicted in the chart. Operating room teams will have an anesthetist assigned from the consultant and special groups pool.

e. Next, consult the Chief of the State First Aid and Ambulance Service and the Civil Defense Chairman of the Georgia American Legion and decide how many units the Atlanta Metropolitan Area can contribute to the reserve pool of the Mobile First Aid Units and make appointments accordingly.

3. After this, complete the selection of the local C. D. V. M. S. C. as follows:

a. Select staffs for all affiliated grammar schools using non-hospital personnel as freely as possible. When the personnel available precludes this, skeleton grammar school training units are appointed, to be brought up to full strength as soon as feasible.

b. The remaining local professional personnel are directed to report to the nearest Control Station in case of a disaster and remain under direction of the Station Regulation Officer until assigned elsewhere. These assignments may be as special teams or as individuals as needed to augment the parent hospital staff, in the improvised hospital system, or in the evacuation system in general.

For coordination and better understanding, it is recommended that those directly responsible for these assignments read the articles, *"The Role of Hospitals in Civil Defense"* and *"Civil Defense Health Service Operations"* which are available upon request.

To summarize, the following paragraphs show the areas of responsibility of Atlanta parent hospitals and their affiliated improvised hospital systems in the high and grammar schools:

CRAWFORD W. LONG HOSPITAL

Adamsville Health Center
Ben Hill Health Center
Blackman-Walton Sanatorium
Fulton Health Center
South Fulton Health Center
Our Lady Perpetual Help
Brown High:
- Connally
- Harris
- Lee
- Peeples
- Ragsdale
- Stanton

Smith High:
- Cook
- Crew
- Formwalt
- Georgia Avenue
- Key
- Pryor

Southwest High:
- Cascade
- Ben Hill
- Fain
- Sandtown
- West Haven

Sylvan Hills High:
- Adair
- Capitol View
- Sylvan Hills

Private Schools:
- Ga. Trng. Schools for Girls
- St. Anthony's

EMORY UNIVERSITY HOSPITAL

Buckhead Health Center
DeKalb County Health Center
Ponce de Leon EENT Hospital
Scottish Rite Hospital
U. S. Hospital No. 48
Lawson V. A. Hospital
Avondale High:
- Medlock
- Scottdale
- Avondale
- Glenhaven
- Alexander Hooper (North)

Chamblee High:
- Dunwoody
- Doraville
- Cherry
- Brookhaven

Druid Hills High & Elementary
- Thomson

Clarkston High & Elementary
- Rehobeth

Grady High:
- Forrest
- Clark Howell
- Inman
- Morningside
- Smillie
- Spring

Lithonia High & Elementary
- Rock Chapel
- Redan
- Candler

Stone Mountain High:
- Stone Mountain

Tucker High & Elementary
Milton High:
- Hopewell
- Milton
- Newton
- Northwestern
- Ocee
- Warsaw

Roswell High:
- Morgan Falls
- Roswell

Decatur Boys & Girls Highs
- Clairmont
- Fifth Avenue
- Glenwood
- Oakhurst
- Ponce de Leon
- Winnona Park

Private Schools:
- Westminster Schools

GEORGIA BAPTIST HOSPITAL

Eggleston Hospital
Fulton Hospital
Fulton County Sanitorium
Lakewood Health Center
Jere Wells Health Center
White Cross
Bass High:
- Forrest
- Highland
- Mary Lin
- Moreland

Fulton High:
- Benteen
- Humphries
- Lakewood
- Perkerson

Murphy High:
- East Lake
- Gordon
- Kirkwood
- West
- Whitefoord

S. W. DeKalb High:
- Leslie J. Steel
- Bouldercrest
- Wesley Chapel
- Alexander Hooper (South)

Roosevelt High:
- Faith
- Gordon
- Grant Park
- Jones
- Milton
- Slaton
- West

PIEDMONT HOSPITAL

College Park Health Center
East Point Health Center
Hapeville Health Center
Campbell High:
- Cedar Grove
- Central
- Eastern
- Rice
- Riley
- Union City
- Word, M. P.

College Park High:
- Longino
- Neely
- Newton Estates
- Young, S. R.

Hapeville High:
- College Street
- North Avenue

Russell High:
- Central Park
- Church Street
- Harris Street
- Wells, Jere A.
- Smith, Marion

Forest Pk. High & Elementary
- Mountain View

Jonesboro High & Elementary
- Lovejoy
- East Clayton
- Riverdale
- Morrow

N. Clayton High & Elementary
Private Schools:
- Georgia Military Academy

ST. JOSEPH'S INFIRMARY

Atlanta Sanitorium
Battle Hill
Center Hill Health Center
Aidmore
Happy Haven
Howell Mill Health Center
Peachtree Sanitorium
Rockdale Health Center
Westside Health Center
Northside High:
- Brandon
- E. P. Howell
- E. Rivers
- Bolton
- Hammond
- Liberty-Guinn

O'Keefe High:
- Couch
- Fowler
- Goldsmith
- Haygood
- Home Park
- Luckie

West Fulton High:
- Carey
- Center Hill
- Chattahoochee
- Cox
- Mayson

Private Schools:
- Atlanta Institute of Speech & Expression
- Christ the King
- Crichton Business College, Inc.
- Harrison Draughon School of Commerce
- University School for Boys
- Washington Seminary
- Marist College
- Marsh Business College
- Sacred Heart Parochial
- Sou. Business University
- Lovett

GRADY HOSPITAL

Catholic Colored Clinic
Henderson Hospital
McLendon Medical Clinic
Steiner Clinic
Wm. A. Harris Mem. Hospital

Howard High:
Hill
Hope
Johnson
South Atlanta
Wesley
Yonge
Turner High:
Anderson Park
Battle Hill
Blantown
Carter (F)
Hapeville
Hunter Hill
New Hope
Philadelphia
Rockdale
Scott
S. Atlanta (F)
Stewart
Thomasville
Washington High:
Bush Mountain
Carter, E. R.
Crogman
Davis
English Avenue
Gray
Walker
Ware
Linwood Park High & Elementary
Avondale High:
Mt. Moriah
Tucker
Avondale
Clarkston
Stone Mountain
County Line
Bruce St. High & Elementary
East Point High:
College Park
Fairburn
Jonesboro High & Elementary
(New Forest Chapel High & Elementary now under construction will replace Jonesboro High & Elementary)
Forest Chapel
Mathlama
Sylvester
Private and Denominational Colleges:
Atlanta School of Social Work
Atlanta University
Clark College
Gammon Theological Seminary
Morehouse College
Morris Brown College
Spelman College

KENNESTONE HOSPITAL

Austell Hospital, Inc.
Clark Hospital
Acworth High & Elementary:
Blackwells
Elizabeth
Kennesaw
Mt. Bethel
Mt. View
Austell High & Elementary:
Riverside
Fitzhugh Lee High & Elementary
Mableton High & Elementary:
Harmony
McEachern High & Elementary
Powder Springs High & Elementary
Robt. L. Osborne High & Elementary
Smyrna High & Elementary
Marietta High & Elementary:
Allgood Road
Dodd Street
Keith Grammar
Park Street
Pine Forest
Waterman
West Side
Lemon Street High (Colored)
Lemon Street
Acworth
Austell
Fitz Hugh Lee
Kennesaw
Mableton
Powder Springs
Symrna
Liberty Hill

Finally, for the information of all appointees, it is pointed out that the Chief of the State Casualty Evacuation Service, with the staff, is responsible for keeping the records of the State C. D. V. M. S. C., receiving the prescribed oath of each appointee, seeing that each unit has clear-cut instructions as to its duties, and for developing standard operating procedures. It is recommended that the local Chief of the Casualty Evacuation Service, with the staff, perform the equivalent functions in the local set-up.

SCHOOL HEALTH

JOHN H. VENABLE, M.D., Griffin

Health Departments, schools and physicians are coming to realize more and more the opportunities for effective service in the area of school health, a convenient misnomer abbreviated to cover all of the aspects of the health of children who are of school age.

There are many reasons why this segment of the community offers such a fertile field for health service, including:

1. Children in school, from the ages of six to eighteen, are a stable homogeneous population, easily accesible, and include a complete cross-section of the community. There is no other universal group in a community.
2. Part of the school curriculum is health instruction which provides a base on which excellent programs can be built, while, at the same time, the programs vitalize the instruction.
3. Here can be created an opportunity for the physician, the school (Health Department) nurse, the teacher and the parent to together understand the child and more effectively meet his needs.
4. Case-finding surveys for defects reach all children in the community and make it possible to correct many defects which would otherwise continue to interfere with progress in school.
5. The physician, nurse and parent can enrich the teacher's understanding of the child in a way not otherwise possible.
6. The teacher-nurse team can provide support and stimulation for the parent to give the child the best possible health environment.

Because of these unique aspects and opportunities of Schoo! Health this phase of public health is growing by leaps and bounds.

The Spalding-Pike-Lamar Health District Staff. with headquarters at Griffin, has had the opportunity, for three and one-half years of learning a great deal about School Health Programs by virtue of a special grant of Children's Bureau Funds for an experimental Project sponsored by the Division of Maternal and Child Health of the Georgia Department of Public Health and the Spalding-Pike-Lamar Health Department. This, by the way, is one of only two such grants in the United States.

From our experience in this intensive School Health Program we have come to feel that the ini-

tiative may come from any interested community group but that, to be successful, the local health department must accept the responsibility of acquanting all community groups with their specific responsibilities. The parents, the school administrators, the teachers, the physicians and the health department staff must understand both the potentialities of the program and their responsibilities to it. And the planning must be jointly done by representatives of all these groups.

The (Health Department) school nurse is the common factor in all of the relationships. She must have clear-cut objectives for her schools, gained from her own professional understanding and from joint planning with faculties, parents, etc. She must expedite physician-teacher-parent conferences and she must follow up all programs and recommendations.

The physician must acquaint himself with the contributions he may make as a professional advisor as well as a therapist, develop the preventive medical approach, instead of the therapeutic. He must learn to understand the things that parent or teacher may wish to discuss, and ways to stimulate that discussion. He must come to satisfy his professional needs in this type of activity and not depend only on the treatment of an organic defect, or illness, for his job satisfaction. Further, he must learn to depend on the nurses and the teachers for the skills they have developed which contribute so significantly to the team approach.

The teacher must come to realize how she can economically use the professional abilities available to her; that she must initiate screening programs in order to conserve professional time for the examination of abnormal children; that she must follow up, within her ability, all situations in which she shares information about a child; and that her concept of her children's health needs can be more accurate than a more professionally qualified person who sees the child only occasionally.

Parents have many responsibilities in this type of program which they sometimes, unfortunately, do not adequately meet. This is a part of the problem of being a parent which can be lessened by full use of the professional help which is available; but the parent must want to use this help and must want sincerely to create the most favorable environment for the child.

The basic constituents of a School Health Program, as we have learned from our experience in Spalding-Pike-Lamar Health District, are listed below. An attempt has been made to list them in the order of increasing cost and complexity. Any community, however, planning to set up a School Health Program might easily have greater need for an expensive part of the Program, and would justifiably decide to begin with it even though it excluded two or three of the less costly phases.

Constituents of a School Health Program:

1. School Sanitation—cleanliness of rest rooms, sewage disposal, water supply, school lunch room, etc.
2. Health Education—joint planning of health instruction by health department personnel and school faculties.
3. Vision and Hearing Screening—the discovery by teachers or interested lay people and re-screening by Health Department nurses of children whose vision and/or hearing justify further examination.
4. Nutrition Education and Experimentation—the use of diet surveys, rat experiments, etc., to impress upon the children the importance of adequate diet and to motivate them to eat an adequate diet.
5. The control of nuisance diseases (itch, lice, impetigo, ringworm, etc.)
6. Defect finding in children (other than vision and hearing defects).
   a. Teacher observation screening for those who should be examined by a doctor;
   b. Nurse-teacher conference about these children;
   c. Physical examination of these children by physicians;
   d. Laboratory work;
   e. Nurse-teacher-doctor conference with the parent about the child.
7. Promotional and educational mental hygiene program.
8. Facilities for the correction of discovered defects, both for those who can afford and those who cannot afford to pay for this correction.
9. Therapeutic child guidance clinic.

It is generally agreed by all who have had experience in School Programs that the facilities for follow up and correction of defects must be readily available to justify any screening or defect finding. Information as to the number of defects present in a population serves only to define the problem. It does little or nothing to correct it; and no one is better off except for a more accurate understanding of the magnitude of the problem.

For example, it is of no value, other than for planning purposes, to know how many eye defects are present in an isolated rural community if competent refractions and glasses are not available for correction of these defects.

Physicians must realize their dual responsibility for finding defects and for following up and correcting defects. In any case, the number of patients consulting local physicians will be increased by any screening program. Some parents will be upset by failures in screening programs and insist on an unnecessarily prompt follow up. The doctor needs to know what screening process has been used, how many false failures to expect and how to reassure the parent. Moreover, a certain number of parents will be unable to afford correction and some community effort will be needed to provide the required facilities. Awareness by the physicians of the need for follow up and correction and interest on the part of the community can almost invariably result in adequate corrections. The plan, however, should be fully formed before the screening begins—not developed as an emergency measure later.

What are the results of a School Health Program in a community?

In the first place, there is an increasing community

interest in the health of school children which spreads to other areas and results in a wide-awake, progressive community interest in health matters.

Many defects are found earlier than they would otherwise be discovered, if, indeed, they would ever be. Early correction of these defects promotes better health, better education and better citizenship. There is even a dollar and cents profit through the more effective use of school facilities by our future leaders.

Because of the increased health of the community, the community becomes more dynamic, happier and better prepared to solve all of its problems.

More specific results that may be expected from such programs can be taken from our files. We are in process of a statistical study of the number and type of defects and the pattern by which they are distributed through the school population. Exact figures are not yet available, but summaries may be given to show the magnitude of the problem.

The following figures are the results of School Program activities among the approximately 12,000 children who have made up our school population during the two and five-ninths school years the screening programs have operated through Dec. 31, 1951.

Total number of children in population approximately	12,000
Total number of children examined in schools	6,630
Total number of children found to have defects at Pediatric Clinic	2,928
Total number of children with corrected defects, or defects in process of correction	2,792

It can be seen that approximately one school child out of two has been screened by doctors in school; and almost one out of two of those examined, or nearly one out of four of the total number of children, had defects which needed further study or correction.

Such a brief sketch of the importance of school health programs and summaries of what can be accomplished speak for themselves. A less obvious factor is the bringing together of many portions of the community into a team approach. Only through understanding, cooperation and wide-spread enthusiasm on the part of Health Department personnel, school personnel, physicians and other community leaders can a school program really be successful. One should never be started without sufficient joint planning to produce such understanding and cooperation, nor until every one accepts the responsibilities he or she must have in this important work.

Whatever a good School Health Program may cost, the profit, in healthier children utilizing more effectively their educational opportunities and potentially happier and better citizens, can never be fully estimated in terms of satisfaction or of dollars and cents.

PRESS COMMENT: *Medicine's Not Just a Job*

A doctor in Pennsylvania is said to have refused a call the other night to treat a woman's child because she didn't have the money to pay him. Her baby died as she was carrying it through the cold to get help after his refusal.

Following the incident, the County Medical Society ruled he didn't refuse her because she couldn't pay, and one member sounded off that a "doctor is free to do as he pleases just like anybody else."

Such an attitude is probably not widespread in the medical profession but the nub of the matter is that a doctor has not such right.

A doctor, whether he likes it or not, is just like a preacher: when he chooses medicine he chooses a vocation—a calling—not just a job. His profession necessarily places him at the call of humanity when it suffers. And needless to say, suffering and medical need are not confined to those with full purses.

This problem—how the empty purse people are going to get adequate medical care—has existed for a long time now.

Doctor bills are high and break the financial back of many ordinary people when they are seriously ill and have to have them. Hospital bills are worse, and prove more than a straw that collapses a man's budget when they are necessary.

We do not imply of course that the high cost of medicine is something the doctors hatched up. But regardless of the cause, it is still a knotty problem for the majority.

What the final answer will be remains to be seen. But it is doubtful it will be discovered by the high command of the American Medical Association who seem more concerned to spend thousands of dollars commandeered from its reluctant members to lambast the "socialists" in Washington than to devise a plan which will assure everybody a reasonable expectation of medical care if and when he needs it.

Some form of medical insurance with universal coverage at low rates and which will pay the whole bill when a man falls into a hospital will have to be devised.

To have insurance that still leaves you deep in the financial well after you get out of sick bed is no answer. Besides which, less than half the population now have any kind of medical insurance whatever.

The public recognizes that medicine is an arduous profession. It takes long, hard, expensive years to get an MD and practice of many doctors leaves them very little time for a normal existence thereafter.

Nevertheless, the fact remains when a man chooses to be a doctor he necessarily chooses to be on call to the sick and suffering.

Like the priest or minister, he cannot say no just to please his fancy, or his pocketbook, either.

—LaGrange Daily News.

THE 102ND ANNUAL SESSION

of the Medical Association of Georgia

Atlanta Biltmore Hotel, Atlanta

May 11-14, 1952

OFFICERS FOR 1951-52

President—W. F. Reavis, Waycross
President-Elect—C. F. Holton, Savannah
First Vice President—Robert C. McGahee, Augusta
Second Vice President—H. Ansley Seaman, Waycross
Secretary-Treasurer—David Henry Poer, Atlanta
Executive Secretary—Mr. Sid Wrightsman, Jr., Atlanta

DELEGATES TO THE 1952 ANNUAL SESSION

Counties	*Names and Addresses*
Appling	F. D. Kennedy, Baxley
Baldwin	Charles B. Fulghum, Milledgeville
Banks	J. S. Jolley, Homer
Bartow	A. L. Horton, Cartersville
Ben Hill	Roy J. Johnston, Jr., Fitzgerald
Bibb	J. D. Applewhite, Macon
	C. H. Richardson, Jr., Macon
Blue Ridge	Courtney C. Brooks, Blue Ridge
Brooks	L. A. Smith, Quitman
Bulloch-Candler-Evans	W. E. Floyd, Statesboro
Burke	J. M. Byne, Jr.
Carroll-Douglas-Haralson	C. H. Allen, Bremen
Chatham—	
Georgia Medical Society	T. A. Peterson, Savannah
	John L. Elliott, Savannah
	Ruskin King, Savannah
Chattooga	John J. Allen, Trion
Cherokee-Pickens	C. J. Roper, Jasper
Clarke-Madison-Oconee	M. A. Hubert, Athens
Clayton-Fayette	T. J. Busey, Fayetteville
Cobb	E. A. Musarra, Marietta
Coffee	Horace G. Joiner, Douglas
Colquitt	A. G. Funderburk, Moultrie
Coweta	
Crisp	P. L. Williams, Cordele
Decatur-Seminole	Henry A. Bridges, Bainbridge
DeKalb	F. C. Powell, Decatur
Dooly	J. Douglas McRee, Unadilla
Dougherty	Paul T. Russell, Albany
Elbert	D. N. Thompson, Elberton
Emanuel	R. G. Brown, Swainsboro
Floyd	Warren M. Gilbert, Rome
Forsyth	Marcus Mashburn, Sr., Cumming
Franklin	Robert E. Ridgway, Royston
Fulton	Jack C. Norris, Atlanta
	John W. Turner, Atlanta
	Hal M. Davison, Atlanta
	Tully T. Blalock, Atlanta
	Charles Eberhart, Atlanta
	B. L. Shackleford, Atlanta
	J. D. Martin, Jr., Atlanta
	McClaren Johnson, Atlanta
	William G. Hamm, Atlanta
	Edgar D. Shanks, Sr., Atlanta
	Ben Hill Clifton, Atlanta
	A. O. Linch, Atlanta
	Major F. Fowler, Atlanta
Glynn	C. A. Wilson, Jr., Brunswick



R. C. McGAHEE, M.D.
Augusta
First Vice President



WILLIAM FARRELL REAVIS, M.D.
Waycross
President 1951-1952

C. F. HOLTON, M.D.
Savannah
President-Elect 1951-1952



DAVID H. POER, M.D.
Atlanta
Secretary-Treasurer and
Editor of The Journal



Gordon	Lewis R. Lang, Calhoun
Grady	J. V. Rogers, Cairo
Gwinnett	Sylvester Cain, Norcross
Habersham	J. J. Arrendale, Cornelia
Hall	Rafe Banks, Jr., Gainesville
Hancock	C. S. Jernigan, Sparta
Hart	J. Hubert Milford, Hartwell
Henry	R. V. Brandon, McDonough
Houston-Peach	A. Smoak Marshall, Fort Valley
Jackson-Barrow	Alex B. Russell, Winder
Jasper	E. M. Lancaster, Shady Dale
Jefferson	C. Roy Williams, Wadley
Jenkins	A. P. Mulkey, Millen
Lamar	James H. Jackson, Barnesville
Laurens	Edward B. Claxton, Dublin
Macon	Thos. M. Adams, Montezuma
McDuffie	Frank N. Gibson, Thomson
Meriwether-Harris	W. P. Kirkland, Manchester
Mitchell	C. L. Howard, Pelham
Monroe	George H. Alexander, Forsyth
Montgomery	J. W. Palmer, Ailey
Morgan	W. C. McGeary, Madison
Muscogee	Elisha J. Cain, Columbus
	George M. Hutto, Columbus
Newton	James R. Sams, Covington
Ocmulgee—	
Bleckley-Dodge-Pulaski	Albert R. Bush, Hawkinsville
Polk	J. E. Griffith, Rockmart
Rabun	Lester Neville, Dillard
Randolph-Terrell	Robert B. Martin, III, Cuthbert
Richmond	Robert C. McGahee, Augusta
	T. W. Goodwin, Augusta
	David R. Thomas, Jr., Augusta
Rockdale	Harvey E. Griggs, Conyers
Screven	Katrine Rawls Hawkins, Sylvania
South Georgia: Berrien-Clinch-Cook-Echols-	
Lanier-Lowndes	A. G. Little, Jr., Valdosta
Spalding	T. G. Smaha, Griffin
Stephens	Arthur G. Singer, Toccoa
Sumter	J. C. Logan, Plains
Tattnall	A. G. Pinkston, Jr., Glennville
Taylor	R. C. Montgomery, Butler
Telfair	C. J. Maloy, McRae
Thomas	George R. Dillinger, Thomasville
Tift	Eugene M. Flowers, Tifton
Toombs	R. H. DeJarnette, Vidalia
Tri-County:	
Calhoun-Early-Miller	Turner W. Rentz, Colquitt
Tri-County:	
Liberty-Long-McIntosh	I. G. Armistead, Townsend
Troup	Charles T. Cowart, LaGrange
Upson	John D. Blackburn, Thomaston
Walker-Catoosa-Dade	Fred H. Simonton, Chickamauga
Walton	Samuel J. DeFreese, Monroe
Ware	W. L. Pomeroy, Waycross
Warren	H. B. Cason, Warrenton
Washington	B. L. Helton, Sandersville
Wayne	
Whitfield	H. L. Erwin, Dalton
Wilcox	V. L. Harris, Rochelle
Wilkes	A. Dan Duggan, Washington
Worth	W. P. Stoner, Sylvester

LOCAL COMMITTEE ON ARRANGEMENTS

General Committee

James H. Semans, Chairman
Charles F. Stone, Jr., Co-Chairman
Duncan Shepard — Cyrus W. Strickler, Jr.
W. P. Nicolson, Jr.

Subcommittee on Reception and Hotels

A. H. Letton, Chairman
Richard H. Smoot — John R. Lewis, Jr.

Subcommittee on Alumni Reunions

MEDICAL COLLEGE OF GEORGIA
Herbert S. Alden, Chairman
Glenn J. Bridges — David L. Hearin

EMORY UNIVERSITY SCHOOL OF MEDICINE
R. Bruce Logue, Chairman
Eugene L. Griffin — Wadley R. Glenn
Robert Carter Davis — William L. Paullin, Jr.
John T. Akin, Jr. — W. Vernon Skiles, Jr.

Subcommittee on Transportation

Thomas J. Florence, Chairman
Harold W. Adams — Jack K. Bleich
David D. Merren

Subcommittee on Convention Halls

Fred B. Hodges, Jr., Chairman
Joe S. Cruise

Subcommittee on Golf

John H. Ridley, Chairman
Richard A. Elmer — T. R. Staton
William C. Helms — Curtis D. Benton, Jr.
William E. Goodyear

Subcommittee on Entertainment

Shelley C. Davis, Chairman
Walter W. Daniel (Deceased)
B. L. Shackleford — Vernon E. Powell

Subcommittee on Publicity and Public Relations

Christopher J. McLoughlin, Chairman
Lamont Henry — McClaren Johnson

Subcommittee on Finance

Mark S. Dougherty, Jr., Chairman
Sterling Jernigan — William T. Edwards
C. Purcell Roberts — Ben S. Read

Subcommittee on Liaison with Woman's Auxiliary

Walker L. Curtis, Chairman
F. Kells Boland, Jr. — Evert A. Bancker
Clifton G. Kemper — William G. Whitaker

OUTLINE OF PROGRAMS FOR SCIENTIFIC SESSIONS

The following papers are announced to be read before the scientific sessions. The order here is not necessarily the order that will be followed in the Official Program, and minor changes may be required by conditions beyond the control of the committee. Be sure to check your Official Program for final details.

Since so many changes have been made in all parts of the program, your indulgence is requested for any errors, omissions or disappointments. We hope to improve each year.

Thomas L. Ross, Jr.
H. Ansley Seaman
W. F. Reavis
David Henry Poer
Richard Torpin, Chairman



Benj. H. Minchew, M.D.
Waycross
Delegate to the A.M.A.



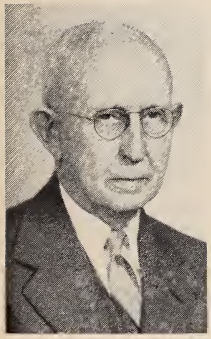
C. H. Richardson, Sr., M.D.
Macon
Delegate to the A.M.A.



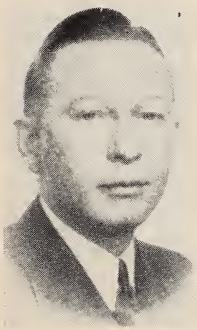
Eustace A. Allen, M.D.
Atlanta
Delegate to the A.M.A.



Wm. R. Dancy, M.D.
Savannah
Alt. Delegate to the A.M.A.



C. L. Ayers, M.D.
Toccoa
Alt. Delegate to the A.M.A.



Carter Smith, M.D.
Atlanta
Alt. Delegate to the A.M.A.



Lee Howard, M.D.
Savannah
Councilor, First District



C. K. Wall, M.D.
Thomasville
Councilor, Second District



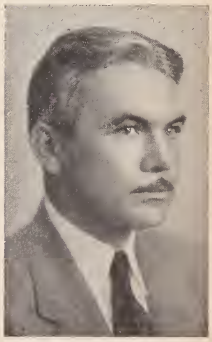
W. G. Elliott, M.D.
Cuthbert
Councilor, Third District



J. W. Chambers, M.D.
LaGrange
Councilor, Fourth District



Marion C. Pruitt, M.D.
Atlanta
Councilor, Fifth District



H. D. Allen, Jr., M.D.
Milledgeville
Councilor, Sixth District

Announcing

THE 102nd ANNUAL SESSION OF THE

MEDICAL ASSOCIATION OF GEORGIA

ATLANTA BILTMORE HOTEL, MAY 11, 12, 13 and 14

GUEST SPEAKERS INCLUDE:

Dr. John W. Cline, President AMA, San Francisco, Calif.
Dr. R. B. Robins, President AAGP, Camden, Ark.
Dr. Willis J. Potts, Chief Surgeon, Children's Memorial Hospital, Chicago, Ill.
Dr. David M. Davis, Professor of Urology, Jefferson Medical College, Philadelphia, Pa.
Dr. Barton R. Young, Professor of Radiology, Temple University School of Medicine, Philadelphia, Pa.
Dr. James Taggart Priestley, Mayo Clinic, Rochester, Minn.
Dr. Robert A. Ross, Professor of Obstetrics and Gynecology, Duke University School of Medicine, Durham, N. C.
Dr. H. Earle Conwell, Professor of Orthopedics, Medical College of Alabama, Birmingham, Ala.
Dr. W. L. Wilson, Federal Civil Defense Administration, Washington, D. C.
Dr. Edward Weiss, Professor of Clinical Medicine, Temple University School of Medicine, Philadelphia, Pa.
Dr. Ralph R. Tompsett, Cornell University Medical College, New York, N. Y.

Also: Technical Exhibits, Scientific Exhibits, Moving Pictures

35 Members of MAG will present papers on scientific subjects.

SPECIAL LUNCHEONS for the following groups:

Monday, May 12, 1:00 P. M.:
Georgia Urological Society, Room 14, Mezzanine, Atlanta Biltmore
Georgia Radiological Society, Room 6, Mezzanine, Atlanta Biltmore
Georgia Pediatric Society, Pompeian Room, Atlanta Biltmore

Tuesday, May 13, 1:00 P. M.:
Civil Defense Section, Empire Room, Atlanta Biltmore
American Trudeau Society, Georgia Chapter, Room 6, Mezzanine, Atlanta Biltmore
Georgia Academy of General Practice, Pompeian Room, Atlanta Biltmore
Georgia Society of Ophthalmology and Otolaryngology, Room 10, Mezzanine Atlanta Biltmore

Wednesday, May 14, 12:45 P. M.:
Georgia State Obstetrical and Gynecological Society, Room 10, Atlanta Biltmore
American College of Chest Physicians, Georgia Chapter, Room 14, Mezzanine, Atlanta Biltmore
Georgia Chapter, American College of Surgeons and Georgia Industrial Surgeons Association, Pompeian Room, Atlanta Biltmore

SPECIAL DINNERS:

President's Banquet
Medical College of Georgia Alumni
Emory University School of Medicine Alumni

Hotel facilities in Atlanta will be at a premium. Make your reservations now.

NOTE: A series of twelve **Refresher Courses** on up-to-date aspects of the basic sciences will be held in Atlanta on Saturday and Sunday, May 10-11, for the benefit of interested members attending the 102nd Annual Session. Advance applications should be addressed to Drs. John T. Akin and J. Willis Hurst, 202 Medical Arts Building, Atlanta.

THE PROGRAM

Sunday Morning, May 11

Academy of Medicine

9:00 **Committee Meetings**
11:00 **Council Meeting**

Sunday Afternoon, May 11

Auditorium, Academy of Medicine

2:00 **Joint Memorial Service**

Presiding: W. F. Reavis, President, Waycross
Invocation—Dr. Robert W. Burns, Minister, Peachtree Christian Church, Atlanta.
Concordia Laelitia—(14th Century hymn, arranged by Deems Taylor) Emory Glee Club under the direction of Dr. Malcolm H. Dewey, Atlanta.
Memorial Address—Dr. Robert W. Burns.
In Memoriam—J. Calvin Weaver, and Mrs. Shelley C. Davis
Salvation Belongeth to Our God (Tchesnokov)—Emory Glee Club, directed by Dr. Malcolm H. Dewey
Benediction.

3:00 **House of Delegates**—Auditorium, Academy of Medicine.
Georgia Radiological Society film-reading session, Crawford W. Long Memorial Hospital.

Sunday Night, May 11

Academy of Medicine

6:00 **Dinner for Delegates and Wives as guests of Fulton County Medical Society**—Dining Hall

7:00 **House of Delegates**—Auditorium.

Monday Morning, May 12

Atlanta Biltmore Hotel

8:00 **Motion Pictures**—Exhibition Hall Auditorium.
(The physician who produced the film to be present for discussion.)

Modified Perineal Prostatectomy
DAVID D. MERREN, Atlanta

Intra-oral and Paryngeal Structures and Their Movements
SIMON KRANTZ, Chamblee

9:00 **FIRST GENERAL SESSION** — Exhibition Hall Auditorium, Atlanta Biltmore Hotel.

Presiding: W. F. Reavis, President, Waycross.
Invocation: Rev. Vernon S. Broyles, Jr., Executive Secretary, Church Extension Board, Presbyterian Church U. S., Atlanta.

Adrenal Cortical Insufficiency in Neo-Natal Period (12 Minutes)
STEWART P. SMITH and M. HINES ROBERTS, Atlanta
Discussion led by Robert B. Greenblatt, Augusta.

Surgical Problems of the Newborn (30 Minutes)
WILLIS J. POTTS, Chicago

Hematuria (12 Minutes)
RUDOLPH BELL and ROY F. STINSON, Thomasville
Discussion led by Montague L. Boyd, Atlanta.

Notes on Prostatic Surgery and Results to Be Expected of It (30 Minutes)
DAVID M. DAVIS, Philadelphia

The Value of Roentgen Examination in Diagnosis of Acute Abdominal Conditions. (30 Minutes).
BARTON R. YOUNG, Philadelphia

10:30 **Fresh Pathology Demonstration**

INTERMISSION (10 Minutes)

11:30 **OPEN PUBLIC MEETING**—Ball Room, Atlanta Biltmore Hotel.

Presiding: W. F. Reavis, President, Waycross.

The Implications of Socialized Medicine
JOHN W. CLINE, President, American Medical Association, San Francisco

President's Address — W. F. Reavis, President, Waycross.

Presentation of the President's Gold Key to President Reavis by W. A. Selman, Atlanta.

Presentation of Fifty-Year Certificates.

12:30 **OFFICIAL BUSINESS SESSION**
Nomination of Officers.
Announcements.

1:00 **SPECIAL LUNCHEONS**—Atlanta Biltmore Hotel.
Georgia Urological Society, Room 14, Mezzanine.
Georgia Radiological Society, Room 6, Mezzanine.
Georgia Pediatric Society, Pompeian Room.

Monday Afternoon, May 12

2:30 **Special Section Meetings**—Atlanta Biltmore Hotel (Open to all members).
3:00 **Wet Plaster Demonstration**

SECTION ON UROLOGY

2:30 **Room 10, Mezzanine.**
Presiding: Reese C. Coleman, Jr., Atlanta.

Clinical Results Following Intubated Ureterotomy (15 Minutes).
W. L. CHAMPION, MAJOR F. FOWLER, REESE C. COLEMAN, JR., and THOMAS J. FLORENCE, Atlanta.

Intubated Ureterotomy (30 Minutes)
DAVID M. DAVIS, Philadelphia

Recurrent Pyuria in an Infant Due to Ureteral Stasis (10 Minutes)
J. ROBERT RINKER, Augusta
Discussion led by J. Z. McDaniel, Albany.

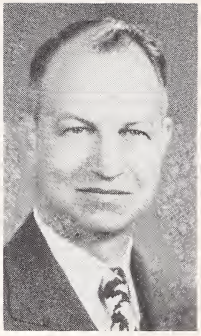
Cytological Changes of the Prostate (10 Minutes).
DAVID C. WILLIAMS, JR., Augusta
Discussion led by Rafe Banks, Jr., Gainesville.

Enuresis (10 Minutes)
HAROLD P. MCDONALD, Atlanta

Two Different Types of Cancer in the Urinary Tract of the Same Individual (10 Minutes.
ERNEST FELBER, Atlanta



D. Lloyd Wood, M.D.
Dalton
Councilor, Seventh District



Sage Harper, M.D.
Douglas
Councilor, Eighth District



Bruce Schaefer, M.D.
Toccoa
Councilor, Ninth District



H. L. Cheves, M.D.
Union Point
Councilor, Tenth District

GENERAL DISCUSSION

Joint Session with Sections on Radiology and Pediatrics, Pompeian Room, Atlanta Biltmore Hotel.
(4:00 P. M.)

SECTION ON RADIOLOGY

2:30 **Room 6, Mezzanine**

Presiding: Max Mass, Macon.

Film Reading Session:

Roentgen Examination of the Soft Tissues of the Air and Food Passages of the Neck, Including Planigraphy of the Larynx.
BARTON R. YOUNG, Philadelphia

Joint Session with Sections on Urology and Pediatrics, Pompeian Room, Atlanta Biltmore Hotel. (4:00 P. M.)

SECTION ON PEDIATRICS

2:30 **Pompeian Room**

Presiding: John A. Simpson, Athens.

Acute Hemorrhagic Nephritis (15 Minutes)
DON F. CATHCART, Atlanta

Discussion led by Philip A. Mulherin, Augusta.

Childhood Accidents and Their Prevention (15 Minutes).
HOWARD J. MORRISON, Savannah

Discussion led by William C. Cook, Columbus.

The Surgical Treatment of Congenital Heart Disease (30 Minutes).
WILLIS J. POTTS, Chicago

GENERAL DISCUSSION

Joint Session with Sections on Urology and Radiology, Pompeian Room, Atlanta Biltmore Hotel (4:00 P. M.).

4:00 **Joint Session of Sections on Urology, Radiology and Pediatrics**—Pompeian Room, Atlanta Biltmore Hotel. Moderator: Albert R. Bush, Hawkinsville.

Case Reports:

Recurring Urinary Obstruction in an Infant
DONALD E. BEARD and WILLIAM E. GOODYEAR, Atlanta

Recurrent Urinary Infection in Children
HENRY D. HOLLIMAN, Atlanta

Megacolon
CHARLES E. HOLLOWAY, Atlanta

Panel Discussion Participants: Barton R. Young, Philadelphia; Willis J. Potts, Chicago; David M. Davis, Philadelphia.

6:30 **Alumni Reunions**
Emory University School of Medicine—Capital City Club, Atlanta.
Address: Mr. Harllee Branch, Jr., Atlanta.

Medical College of Georgia—Piedmont Driving Club, Atlanta.
Address: Governor Herman E. Talmadge, Atlanta.

Tulane University of Louisiana School of Medicine—Capital City Club, Atlanta.
Address: H. W. Kostmayer, New Orleans.

Tuesday Morning, May 13

8:00 **Motion Pictures**—Exhibition Hall Auditorium, Atlanta Biltmore Hotel.

Multiple Arterial Embolism: Triple Embolectomy, Arteriectomy and Vein Graft.
WILLIAM C. MCGARITY and ROY L. ROBERTSON, Emory University

9:00 **SECOND GENERAL SESSION**—Exhibition Hall Auditorium, Atlanta Biltmore Hotel.
Presiding: W. F. Reavis, President, Waycross.

Symposium on Gastroenterology.
Moderator: Fred H. Simonton, Chickamauga.

Prolapsing Gastric Mucosa: A Review of 100 Cases in Private Practice (12 Minutes).
MCCLAREN JOHNSON, Atlanta

One Hundred Consecutive Gastrectomies (12 Minutes).
JOHN W. TURNER and AUGUST B. TURNER, Atlanta

Further Efforts to Reduce Mortality in Bleeding Peptic Ulcers (12 Minutes).
CHARLES S. JONES, Atlanta

Discussion on Gastroenterology Presentations: Max Mass, Macon; Thomas W. Goodwin, Augusta, and W. E. Storey, Columbus.

INTERMISSION (15 Minutes)

Recent Advances in Physical Therapy Applied to General Practice (15 Minutes).
ARTHUR M. PRUCE, Atlanta

Principles of Diagnosis and Treatment in Psychosomatic Disorders (30 Minutes).
EDWARD WEISS, Philadelphia

The Doctor of Tomorrow and Federal Medical Services (15 Minutes).
CHARLES RIESER, Atlanta

Recent Outbreak of Botulism in Georgia (15 Minutes).
WILLIAM B. FACKLER, JR., LaGrange

Surgical Lesions of the Adrenal Glands (30 Minutes).
JAMES TAGGART PREISTLEY, Rochester, Minn.

The Challenge of Civil Defense Health Services . . . The National Picture (30 Minutes).
W. L. WILSON, Washington, D. C.

Civil Defense (Speaker and topic to be announced).

10:30 **Fresh Pathology Demonstration**

1:00 **SPECIAL LUNCHEONS**—Atlanta Biltmore Hotel.

Civil Defense Section (Woman's Auxiliary to participate), Empire Room.
American Trudeau Society, Georgia Chapter, Room 6, Mezzanine.
Georgia Academy of General Practice, Pompeian Room.
Georgia Society of Ophthalmology and Otolaryngology, Room 10, Mezzanine.

Tuesday Afternoon, May 13

2:30 **Special Section Meetings**—Atlanta Biltmore Hotel (Open to all members).

3:00 **Wet Plaster Demonstration**

SECTION ON SURGERY

2:30 **Room 14, Mezzanine**

Presiding: Luther H. Wolff, Chairman, Columbus.

Cancer Symposium
Moderator: Hoke Wammock, Augusta

Tumors of the Neck (10 Minutes).
ROBERT L. BROWN, Emory University

Carcinoma of the Larynx (10 Minutes).
MURDOCK EQUEN, Atlanta

Discussion led by: J. K. Train, Jr., Savannah; James T. King, Atlanta.

Factors Influencing the Prognosis in Carcinoma of the Colon (10 Minutes).
J. D. MARTIN, JR., Emory University

Familial Polyposis (10 Minutes).
D. B. MCRAE, McRae

Discussion led by: John H. Sherman, Augusta; Julian K. Quattlebaum, Savannah.

Cancer of the Stomach (30 Minutes).
JAMES TAGGART PRIESTLEY, Rochester, Minn.

Results of Radiation Therapy in Carcinoma of the Cervix (10 Minutes).
J. BENHAM SJEWART and THOMAS HARROLD, Macon

Controversies, Facts and Detection of Carcinoma in Situ of the Cervix Uteri (10 Minutes).
H. E. NIEBURGS, Augusta

Discussion led by: H. C. Frech, Savannah; J. Elliott Scarborough, Emory University.

SECTION ON INTERNAL MEDICINE

2:30 **Exhibition Hall, Auditorium**

Presiding: Harry T. Harper, Jr., Augusta.

Prognostic and Therapeutic Implications of Classification of Hypertensive Disease (10 Minutes).
ELLISON R. COOK, III, Savannah

Discussion led by: H. Haywood Turner, Columbus.

Does Exertion Cause Coronary Thrombosis? (10 Minutes).
JEFF L. RICHARDSON, Atlanta

Discussion led by: Thomas L. Ross, Jr., Macon.

Indications for Mitral Valve Surgery (10 Minutes).
J. WILLIS HURST, Emory University

Discussion led by: Harry T. Harper, Jr., Augusta.

Mitral Commissurotomy (a film).
OSLER A. ABBOTT, Emory University

Emotional Factors in Cardiovascular Disease



Chas. T. Brown, M.D.
Guyton
Vice-Councilor, First District



Chas. H. Watt, M.D.
Thomasville
Vice-Councilor, Second District



Guy J. Dillard, M.D.
Columbus
Vice-Councilor, Third District



Clarence B. Palmer, M.D.
Covington
Vice-Councilor, Fourth District

(30 Minutes).
EDWARD WEISS, Philadelphia

Intractable Heart Failure (10 Minutes).
LOUIS K. LEVY, Atlanta

Discussion led by: Ernest F. Wahl, Thomasville.

3:30 **Conference**
County and District Society Secretaries
MAG Headquarters, Academy of Medicine
Question and Answer Period

Tuesday Night, May 13

7:30 **President's Dinner**, Ball Room, Atlanta Biltmore Hotel.
Medicine in This Changing World—R. B. Robins, President, American Academy of General Practice, Camden, Arkansas.
Entertainment.
Dancing.

Wednesday Morning, May 14

8:00 **Motion Pictures**—Convention Hall Auditorium, Atlanta Biltmore Hotel.
(The physician who produced the film will be present for discussion in each case.)

Cataract Extraction—A Simplified Technique.
TOM HARBIN, Rome

7:30 **Council Meeting**—Room 7, Mezzanine, Atlanta Biltmore Hotel (Breakfast).

8:30 **House of Delegates**—Ball Room, Atlanta Biltmore Hotel.

10:00 **THIRD GENERAL SESSION** — Exhibition Hall Auditorium, Atlanta Biltmore Hotel.
Presiding: W. F. Reavis, President, Waycross.

Longevity (12 Minutes).
EUSTACE A. ALLEN, Atlanta

Discussion led by L. Minor Blackford, Atlanta.

Certain Problems and the Treatment of Fractures (30 Minutes).
H. EARLE CONWELL, Birmingham, Alabama

Present Status of Antibicrobial Therapy in Tuberculosis (30 Minutes).
RALPH R. TOMPSETT, New York City



John W. Turner, M.D.
Atlanta
Vice-Councilor, Fifth District



H. G. Weaver, M.D.
Macon
Vice-Councilor, Sixth District

The Care of the Female in the Climacteric (30 Minutes).
ROBERT A. ROSS, Durham, N. C.

12:00 **BUSINESS SESSION**—Exhibition Hall Auditorium, Atlanta Biltmore Hotel.
Presiding: W. F. Reavis, President, Waycross.
Election of Officers.
Announcements.
Council Organization Meeting.

10:30 **Fresh Pathology Demonstration**

12:45 **SPECIAL LUNCHEONS**—Atlanta Biltmore Hotel.
Georgia State Obstetrical and Gynecological Society, Room 10, Mezzanine.
American College of Chest Physicians, Georgia Chapter, Room 6, Mezzanine.
Georgia Industrial Surgeons Association and Georgia Chapter, American College of Surgeons, Pompeian Room.

Wednesday Afternoon, May 14

2:30 **Special Section Meetings**—Atlanta Biltmore Hotel.

SECTION ON INDUSTRIAL SURGERY AND TRAUMA

2:30 **Exhibition Hall, Auditorium**

Presiding: Joseph C. Read, Atlanta.

The Early Diagnosis of Congenital Dislocation of the Hip with a Review of 200 Cases (10 Minutes).
J. H. KITE and C. RICHARD KING, Atlanta

Discussion led by Peter B. Wright, Augusta.

Car Window Fractures Left Elbow (10 Minutes).
AUGUSTIN S. CARSWELL, Augusta

Discussion led by: Thomas P. Waring, Savannah.

Therapeutic Uses of Procaine (10 Minutes).
J. C. THOROUGHMAN and HAYWARD S. PHILLIPS, Augusta

Discussion led by William H. Galvin, Emory University.

Practical Consideration of Thrombo-embolism (10 Minutes).
SAM M. TALMADGE and D. F. MULLINS, JR., Athens

Discussion led by: Patrick C. Shea, Jr., Atlanta.

Intramedullary Fixation of Fractures (30 Minutes).
FREDERICK W. COOPER, JR., Emory University and H. EARLE CONWELL, Birmingham, Alabama

SECTION ON THORACIC DISEASES

2:30 **Room 14, Mezzanine**

Presiding: A. Worth Hobby, Atlanta.

Problems in Diagnosis of Bronchogenic Carcinoma (10 Minutes).
ROBERT G. ELLISON and JAMES L. ALEXANDER, Augusta

Discussion led by: Herbert M. Olnick, Macon.

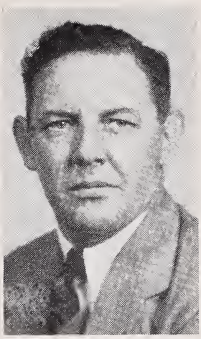
Treatment of Tuberculosis Meningitis (10 Minutes).
RUFUS F. PAYNE, Rome

Discussion led by: Martin M. Cummings, Chamblee.

Congenital Atresia of the Esophagus and Esophago-tracheal Fistula (10 Minutes).
C. RICHARD KING, Atlanta



M. M. Hagood, M.D.
Marietta
Vice-Councilor, Seventh District



J. A. Leaphart, M.D.
Jesup
Vice-Councilor, Eighth District



Chas. R. Andrews, Jr. M.D.
Canton
Vice-Councilor, Ninth Dist.



J. Victor Roule, M.D.
Augusta
Vice-Councilor, Tenth District

Discussion led by: William A. Hopkins, Emory University.

Thoracic Disease Presentation (30 Minutes).
RALPH R. TOMPSETT, New York City

Anesthesia in Endoscopy (10 Minutes).
LESTER RUMBLE, JR. and ALBERT V. GUDE, Atlanta, and WILLIAM H. GALVIN, Emory University

The Surgical Treatment of Residual Fibrocoseous Lesions in Pulmonary Tuberculosis (10 Minutes).
RAYMOND F. CORPE, Rome

Discussion led by: C. C. Aven, Atlanta.

4:00 Joint Session with Section on Industrial Surgery and Trauma, Convention Hall Auditorium, Atlanta Biltmore Hotel.

SECTION ON OBSTETRICS AND GYNECOLOGY

2:30 **Room 10, Mezzanine**

Presiding: Richard Torpin, Augusta.

Pregnancy of Six Months, Complicated by Metastatic Melonoma (10 Minutes).
WILLIS J. HENDRICKS, LaGrange

Discussion led by William W. Coppedge, East Point, and B. A. McCrum, Gainesville.

Use of Hyalouronidase as an Adjunct to Novocain in Pudendal Blocks for Obstetrical Anesthesia (10 Minutes).
EUGENE L. GRIFFIN, Atlanta

Discussion led by: B. Hartwell Boyd, Atlanta.

Pregnancy Toxemia (30 Minutes).
ROBERT A. ROSS, Durham, N. C.

Constriction Ring Dystocia: Report of Three Cases Rather Intensively Studied Among 17,000 Labors (10 Minutes).
RICHARD TORPIN, Augusta

Discussion led by: Evelyn Swilling, Macon, and John R. McCain, Atlanta.

Ovarian Tumors (20 Minutes).
FREDERICK H. THOMPSON, Atlanta

Discussion led by Everett L. Bishop, Atlanta, and Peter C. Graffagnino, Columbus.

4:00 **JOINT SESSION of Sections on Industrial Surgery and Trauma and Thoracic Diseases**—Exhibition Hall Auditorium, Atlanta Biltmore Hotel.

Moderator: Alex G. Little, Jr., Valdosta.
Cardiac Arrest—Panel Discussion.
Participants: William A. Hopkins, Atlanta; James Taggart Priestley, Rochester, Minn.; Osler A. Abbott, Emory University; Perry P. Volpitto, Augusta; Harry T. Harper, Jr., Augusta.

GEORGIA PHYSICIANS WHO HAVE PRACTICED MEDICINE FIFTY YEARS

This list does not contain the names of all Georgia physicians who have practiced medicine 50 years or more. This is the class of 1902 only.

Ayers, Clarence Landers, Toccoa
Barnett, William R., Calhoun
Bryson, Lucas Roscoe, Jefferson
Derrick, Howard Clifton, Oglethorpe
Head, Marvin Monroe, Zebulon
Hendrix, Marion Gordon, Ball Ground
Hughes, Joseph M., Glennville
Jackson, John Brady, Clarkesville
Jennings, William Dickinson, Jr., Augusta
Lee, Lawrence, Savannah
Lester, John Elbert, Marietta
Logan, J. Colquitt, Plains
McBryde, Thomas Edwin, Rockmart
McCord, Mather Marvin, Rome
McDonald, Paul, Bolton
McElveen, Jesse Morgan, Brooklet
McKenzie, John Marvin, Thomaston
Selman, William Arthur, Atlanta
Smith, Linton, Atlanta
Thomas, Frank Hartwell, Valdosta

IN MEMORIAM

Adams, Charles, Cordele, November 2, 1951, aged 51.
Anderson, William Willis, Atlanta, February 1, 1952, aged 63.
Andrews, Agnew, Tifton, January 10, 1952, aged 60.

Armstrong, Thomas Blake, Atlanta, December 2, 1951, aged 67.
Ault, Henry Jason, Dalton, August 8, 1951, aged 75.
Baker, Luther P., Atlanta, November 13, 1951, aged 69.
Barfield, Joseph Rex, Atlanta, May 1, 1951, aged 69.
Barnett, James Miller, Albany, September 12, 1951, aged 72.
Beazley, Alexander Hamilton, Crawfordville, September 5, 1951, aged 71.
Bradley, Thomas Esmond, Fitzgerald, September 29, 1951, age 71.
Brooke, George Carter, Canton, July 4, 1951, aged 60.
Brown, Herman Dobbs, Summerville, January 7, 1952, aged 67.
Carpenter, George L., Wrens, March 28, 1951, aged 67.
Clements, Henry W., Adel, February 6, 1952, aged 74.
Collier, Thomas Jefferson, Atlanta, March 10, 1952, aged 76.
Copeland, Henry W., Griffin, June 4, 1951, aged 73.
Daniel, Walter Wright, Atlanta, February 24, 1952, aged 55.
Dickie, Emmet H., Chatsworth, November 15, 1951, aged 65.
Farmer, Lucius Pierce, Stapleton, May 1, 1951, aged 70.
Gamble, Harold Scott, Camilla, June 22, 1951, aged 31.
Garner, James S., Rome, April 16, 1952, aged 72.
Garrett, John Abner, Meigs, June 5, 1951, aged 71.
Gay, Joseph Reid, Waycross, August 20, 1951, aged 54.
Hall, Thomas Marshall, Milledgeville, January 30, 1952, aged 80.
Harrell, Augustus O., Milan, February 17, 1952, aged 72.
Heyser, David Thomas, Atlanta, January 30, 1952, aged 65.
Hines, Joseph Howard, Atlanta, December 3, 1951, aged 72.
Horton, Barney Elliott, Atlanta, April 23, 1951, aged 77.
Huckaby, A. H., Griffin, March 18, 1952, aged 70.
Hudson, Joseph Haskell, Gough, September 28, 1951, aged 60.
Hurley, Thomas A., Macon, December 21, 1951, aged 72.
Hutchings, Ernest H., Sparta, December 2, 1951, aged 65.
Johnson, Raymond Lovejoy, Waycross, September 1, 1951, aged 70.
Kenyon, Steve Paschal, Dawson, February 28, 1952, aged 61.
Lanier, Leon Ivey, Soperton, November 17, 1951, aged 67.
Lord, Columbus B., Jefferson, February 2, 1952, aged 69.
Maloy, Daniel William Franklin, Milan, October 24, 1951, aged 61.
Moore, Robert Foss, Donalsonville, August 11, 1951, aged 33.
Morgan, David Emmett, LaGrange, March 20, 1952, aged 73.
Murphey, Eugene Edmund, Augusta, April 13, 1952, aged 77.
Norton, Walter Abell, Savannah, December 3, 1951, aged 70.
Parham, LeRoy Glenn, Atlanta, July 12, 1951, aged 63.
Paullin, James Edgar, Atlanta, Augusta 13, 1951, aged 69.
Peacock, J. Domingos, Wadley, April 18, 1952, aged 68.
Peeler, Julian Edwin, Woodland, February 14, 1952, aged 82.
Pratt, Caroline Kreiss, Atlanta, May 22, 1951, aged 38.
Puckett, William M., Irwinton, August 8, 1951, aged 75.
Quillian, Edgar Pierce, Clyattville, May 22, 1951, aged 74.
Quillian, Garnett Wiley, Arlington, Va., August 31, 1951, aged 67.
Reynolds, Horace Maxwell, Cairo, November 20, 1951, aged 33.
Rhodes, William J., Louisville, March 10, 1952, aged 95.
Shaw, Manning Franklin, Omega, April 2, 1952, aged 72.
Spooner, John Ira, Donalsonville, March 11, 1952, aged 68.
Stewart, James A., Portal, March 25, 1952, aged 71.
Taylor, John Cephes, LaGrange, March 25, 1952, aged 66.
Tidmore, Joseph Christopher, Dawson, January 18, 1952, aged 41.
Walton, John Marshall, Atlanta, January 4, 1952, aged 50.
Waring, Antonio Johnston, Savannah, October 8, 1951, aged 70.
Willson, Pleas, Newborn, March 14, 1952, aged 61.
Wilson, James I., Ochlochnee, January 29, 1952, aged 87.
Winn, John H., Columbus, September 17, 1951, aged 63.
Wise, Bowman Joel, Plains, October 17, 1951, aged 63.
Woodroof, William Love, Newnan, August 27, 1951, aged 70.

SCIENTIFIC EXHIBITS
Exhibition Hall
Atlanta Biltmore Hotel

1. "Medical History"—J. Calvin Weaver, Atlanta.
2. "Fluoridation of Public Water Supplies"—State of Georgia Department of Public Health, Atlanta.
3. "Source and Distribution of Drugs"—Georgia Pharmaceutical Association, Atlanta.
4. "Plastic Surgery of the Nose"—John R. Lewis, Jr., Atlanta.
5. "A Presentation on Rheumatic Fever and Rheumatic Heart Disease"—Georgia Heart Association, Atlanta.
6. "Manikin for Teaching the Physiological Action of the Uterus in Labor"—Richard Torpin, Department of Obstetrics and Gynecology, Medical College of Georgia, Augusta.
7. "The Clinical Recognition of Epithelization of the Anterior Chamber Following Cataract Extraction"—F. Phinizy Calhoun, Jr., Atlanta.
8. "Roentgenologic Study of the Mediastinum"—Ted F. Leigh and James V. Rogers, Jr., Department of Radiology, Emory University School of Medicine, Emory University.
9. "Insects of Medical Importance and Arachnida of Medical Importance"—Harry D. Pratt, Medical Entomology Unit, Communicable Disease Center, Public Health Service, Federal Security Agency, Atlanta.
10. "Cyto-Diagnosis of Functional Disorders and Carcinoma of the Uterus"—H. E. Nieburgs, G. L. Wied, Robert B. Greenblatt, Department of Clinical Cytology, Medical College of Georgia, Augusta.
11. "Definitive and Differential Diagnosis of Poliomyelitis"—The National Foundation for Infantile Paralysis, New York 5, New York.
12. "Physical Medicine and Rehabilitation"—Harriet E. Gillette, Crippled Children's Division, State of Georgia Department of Public Health, Atlanta.
13. "Plastic and Reconstructive Sugrery"—William G. Hamm, Frank F. Kanthak and Charles P. Yarn, Jr., Atlanta.
14. "Self Help and Neighbor Help in Civil Defense"—Lester M. Petrie, State of Georgia Department of Public Health, Atlanta.
15. "Expansion of Hospital Facilities"—R. C. Williams, State of Georgia Department of Public Health, Atlanta.
16. "Rapid Photofluorography by Use of Polaroid Process"—Albert A. Rayle, Jr., and H. S. Weens, Department of Radiology, Emory University School of Medicine, Emory University.

TECHNICAL EXHIBITS
Exhibition Hall
Atlanta Biltmore Hotel

Booth:

1. Van Pelt and Brown, Inc.
   Richmond, Virginia
2. American Academy of General Practice
   (Georgia Chapter) Kansas City, Missouri
3. Hoffman-La Roche, Inc.
   Roche Park, Nutley 10, New Jersey
4. Kremers-Urban Company
   141 West Vine St., Milwaukee 12, Wisconsin
5. General Electric X-Ray Corporation
   1383 Spring St., N. W., Atlanta, Georgia
7. The Stuart Company
   35 East Wacker Drive, Chicago, Illinois
8.-9. A. S. Aloe Company
   492 Peachtree St., N. E., Atlanta, Georgia
10. Stansell's Oxygen Service
    429 Ponce de Leon Ave., N. E., Atlanta, Georgia
12. Travenal Laboratories, Inc., Morton Grove, Illinois
13. G. W. Carnrick Company
    P. O. Box 244, Newark, New Jersey
14. Philip Morris & Co., Ltd., Inc.
    100 Park Avenue, New York 17, New York

Booth:

15. Bilhuber-Knoll Corporation
337 Crane Street, Orange, New Jersey
16. Chas. Pfizer & Co., Inc.
630 Flushing Avenue, Brooklyn 6, New York
25. A. H. Robins Company, Inc.
1322-24 West Broad Street, Richmond, Virginia
26. Surgical Selling Company
139 Forrest Avenue, N. E., Atlanta, Georgia
27. J. A. Majors Company
108 Edgewood Avenue, N. E., Atlanta, Georgia
28. Sharp & Dohme, Inc.
640 North Broad Street, Philadelphia 1, Pennsylvania
29. Brayten Pharmaceutical Company
Chattanooga 8, Tennessee
30. The Doho Chemical Corporation
100 Varick Street, New York 13, New York
31. The Nestle' Company, Inc.
Colorado Springs, Colorado
34. Varick Pharmacal Company
75 Varick Street, New York 13, New York
35. Testagar & Co., Inc.
638 Bagley Avenue, Detroit 26, Michigan
37. S. & H. X-Ray Company
501 Peachtree St., N. E., Atlanta, Georgia
38. S. H. Camp and Company
109 West Washington, Jackson, Michigan
39. Ciba Pharmaceutical Products, Inc.
Lafayette Park, Summit, New Jersey
40. Winthrop-Stearns, Inc.
1450 Broadway, New York 18, New York
41. Parke, Davis & Company
Detroit 32, Michigan
50. Estes Surgical Supply Company
56 Auburn Avenue, N. E., Atlanta, Georgia

Booth:

51. Lanteen Medical Laboratories, Inc.
2020 Greenwood Street, Evanston, Illinois
52. E. R. Squibb & Sons
745 Fifth Avenue, New York 22, New York
53. C. B. Fleet Company, Inc.
921 Commerce Street, Lynchburg, Virginia
54. Mead Johnson & Co.
Evansville 21, Indiana
55. Eli Lilly and Company
Indianapolis 6, Indiana
63. M & R Laboratories, Inc.
585 Cleveland Avenue, Columbus 16, Ohio
64. S. E. Massengill Company
527 Fifth Street, Bristol, Tennessee
66. Pet Milk Company
1401 Arcade Building, St. Louis, Missouri
67. Wm. P. Poythress & Co., Inc.
Richmond, Virginia
68. The Wm. S. Merrell Company
Cincinnati 15, Ohio
69. Baby Development Clinic
600 South Michigan Avenue, Chicago, Illinois
70. American Surgical Supply Company
489 Peachtree Street, N. E., Atlanta, Georgia
71. Baker Laboratories, Inc.
4614 Prospect Avenue, Cleveland 3, Ohio
72-73. The Coca-Cola Company
Atlanta, Georgia
74. U. S. Vitamin Corporation
250 East 43rd Street, New York 17, New York
75. Ames Company, Inc.
Elkhart, Indiana
78. The Georgia Plan
875 West Peachtree Street, N. E., Atlanta, Georgia

THE WOMAN'S AUXILIARY

27th Annual Convention
Academy of Medicine, Atlanta
May 11-14, 1952

INVITATIONS

Atlanta, Ga., April 1, 1952

To the Members of the Woman's Auxiliary to the Medical Association of Georgia:

The Woman's Auxiliary to the Fulton County Medical Society is anticipating with real joy the holding of the annual convention of the Woman's Auxiliary to the Medical Association of Georgia in Atlanta May 11-14. As hostess Auxiliary, we extend a cordial invitation to all auxiliary members and to all wives of doctors throughout the state to be with us at this time.

A program of real interest and information is being outlined by officials of the State Auxiliary and the local Auxiliary is planning occasions of social recreation that we believe will add to the fellowship and to the happiness of the meeting.

Numbers promote strength and inspiration and heighten enthusiasm. So, we are counting on your joining the wives of other doctors in a sincere effort to make this convention one of outstanding success!

Sincerely,
MRS. WALKER L. CURTIS, President
Woman's Auxiliary to the
Fulton County Medical Society

PRESIDENT'S INVITATION

Macon, Ga., April 1, 1952

To Members of the Auxiliary to the Medical Association of Georgia, and to those Doctors' wives who are not members:

You are cordially invited to attend the Twenty-seventh Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia in Atlanta, May 11-14. Our meetings will be in the Academy of Medicine, with hotel headquarters at the Biltmore.

Fulton County, our hostess Auxiliary, has made some most interesting plans for your entertainment. Read the program on the following pages, and make your plans to be present.

I am looking forward to seeing each of you in Atlanta. Come and let's make this the best convention yet.

Sincerely,
MRS. J. R. S. MAYS, President
Woman's Auxiliary to the
Medical Association of Ga.

OFFICERS AND COMMITTEES

President—Mrs. J. R. S. Mays ..... Macon
President-elect—Mrs. Ralph W. Fowler ..... Marietta
First Vice-President—Mrs. T. A. Peterson ..... Savannah
Second Vice-President—Mrs. R. C. McGahee ..... Augusta
Third Vice-President—Mrs. Leo Smith ..... Waycross
Recording Secretary—Mrs. Virgil Williams ..... Griffin
Corresponding Secretary—Mrs. Rhea Richardson ..... Macon
Treasurer—Mrs. M. T. Edgerton ..... Atlanta
Historian—Mrs. Ralph McCord ..... Rome
Parliamentarian—Mrs. Ralph Chaney ..... Augusta

Advisory Committee

Dr. Ralph Chaney, Chairman, ... Augusta
Dr. Steve Kenyon (Deceased) ..... Dawson
Dr. E. H. Greene ..... Atlanta
Dr. Enoch Callaway ..... LaGrange
Dr. A. M. Phillips ..... Macon

Standing Committee Chairmen 1951-1952

Achievement Award—Mrs. C. J. Roper ..... Jasper
Archives—Mrs. C. W. Roberts ..... Atlanta
Budget—Mrs. W. G. Elliott ..... Cuthbert
Bulletin—Mrs. Edgar Dunstan ..... Atlanta
Doctor's Day—Mrs. W. P. Stoner ..... Sylvester
Editorial—Mrs. B. H. Clifton ..... Atlanta
Exhibit and Scrapbook Award—Mrs. Dan Jardine ..... Douglas
Legislation—Mrs. Bon Durham ..... Americus
Public Relations—Mrs. J. Harry Rogers ..... Atlanta
Research in Romance of Medicine—Mrs. Milford Hatcher ..... Macon
Revisions—Mrs. Lee Howard ..... Savannah
Student Loan Fund—Mrs. Shelley Davis ..... Atlanta
Trophy Award—Mrs. L. W. Williams ..... Savannah
Special Committee
Camellia Garden—Mrs. R. W. Bradford ..... Milledgeville
Civil Defense—Mrs. Leo Smith ..... Waycross

DISTRICT MANAGERS

First District—Mrs. Harold Smith ..... Savannah
Second District—Mrs. R. M. Joiner ..... Moultrie
Third District—Mrs. L. H. Wolff ..... Columbus
Fourth District—Mrs. Virgil Williams ..... Griffin
Fifth District—Mrs. Murdock Equen ..... Atlanta
Sixth District—Mrs. Edwin Allen ..... Milledgeville
Seventh District—Mrs. Alfred O. Colquitt ..... Marietta
Eighth District—Mrs. Jas. Campbell ..... Valdosta
Ninth District—Mrs. Joe Arrendale ..... Cornelia

PRESIDENT OF COUNTY AUXILIARIES

Baldwin—Mrs. R. W. Bradford ..... Milledgeville
Bibb—Mrs. Thomas Ross, Jr. ..... Macon
Bulloch-Candler-Evans—Mrs. J. L. Nevill ..... Metter
Carroll-Douglas-Haralson—Mrs. J. W. Watts ..... Bowdon
Chatham—Mrs. W. L. Osteen ..... Savannah
Cherokee-Pickens—Mrs. C. J. Roper ..... Jasper
Cobb—Mrs. Bruce Burleigh ..... Marietta
Coffee—Mrs. Dan Jardine ..... Douglas
Colquitt—Mrs. R. H. Fike ..... Moultrie
Crisp—Mrs. D. T. Gower, Jr. ..... Cordele
DeKalb—Mrs. Howard B. Lee ..... Decatur
Dougherty—Mrs. Paul Russell ..... Albany
Floyd—Mrs. Lester Harbin ..... Rome
Fulton—Mrs. Walker Curtis ..... College Park
Glynn—Mrs. Leon Brawner ..... St. Simons
Gordon—Mrs. Chas. K. Richards ..... Calhoun
Gwinnett—Mrs. J. R. Chastain ..... Buford
Habersham—Mrs. Charles Henry ..... Clarkesville
Hall—Mrs. H. E. Valentine, Jr. ..... Gainesville
Jackson-Barrow ..... Mrs. Edwin H. Etheridge, Winder
Muscogee—Mrs. W. F. Jenkins ..... Columbus
Randolph-Terrell—Mrs. J. C. Patterson ..... Cuthbert
Richmond—Mrs. Stephen Brown ..... Augusta
South Georgia—Mrs. B. G. Owens ..... Valdosta
Stephens—Mrs. Arthur Singer ..... Toccoa
Sumter—Mrs. W. B. McMath ..... Americus
Tift—Mrs. E. M. Flowers ..... Tifton
Troup—Mrs. Henry Jones ..... West Point
Upson—Mrs. H. D. Tyler ..... Thomaston
Ware—Mrs. H. T. Adkins ..... Waycross
Washington—Mrs. Joseph Lever ..... Sandersville
Whitfield—Mrs. David Lloyd Wood ..... Dalton

PAST PRESIDENTS AND CONVENTIONS

Honorary Presidents for Life

Mrs. James N. Brawner, Sr., Atlanta
Mrs. Eustace A. Allen, Atlanta

1924—Augusta (Organization)—Mrs. C. W. Roberts, Atlanta, Temporary Chairman.
1925—Atlanta—Mrs. James N. Brawner, Atlanta
1926—Albany—Mrs. William H. Myers, Savannah
1927—Athens—Mrs. C. W. Roberts, Atlanta
1928—Savannah—Mrs. Paul Holiday (Mrs. J. C. Moore, Gaffney, S. C.)
1929—Macon—Mrs. Charles C. Hinton, Macon
1930—Augusta—Mrs. Marion T. Benson, Atlanta
1931—Macon—Mrs. Charles C. Harrold, Macon
1932—Savannah—Mrs. Ralston Lattimore, Savannah
1933—Macon—Mrs. S. T. R. Revell, Louisville
1934—Augusta—Mrs. J. Bonar White, Atlanta (Deceased)
1935—Atlanta—Mrs. J. E. Penland, Waycross
1936—Savannah—Mrs. Ernest R. Harris, Winder
1937—Macon—Mrs. W. R. Dancy, Savannah
1938—Augusta—Mrs. Ralph Chaney, Augusta
1939—Atlanta—Mrs. Warren A. Coleman, Eastman
1940—Savannah—Mrs. Eustace A. Allen, Atlanta
1941—Macon—Mrs. H. G. Banister, Ila
1942—Augusta—Mrs. Lee Howard, Savannah
1943—Atlanta—Mrs. J. Lon King, Macon
1944—Savannah—Mrs. Olin S. Cofer, Atlanta
1945—no convention
1946—Macon—Mrs. W. T. Randolph, Winder
1947—Augusta—Mrs. Bruce Schaefer, Toccoa
1948—Atlanta—Mrs. W. G. Elliott, Cuthbert
1949—Savannah—Mrs. S. A. Anderson, Atlanta
1950—Macon—Mrs. J. Harry Rogers, Atlanta
1951—Augusta—Mrs. Lehman W. Williams, Savannah

WOMAN'S AUXILIARY TO THE FULTON COUNTY MEDICAL SOCIETY

COMMITTEES

Mrs. Walker L. Curtis, President and General Chairman
Mrs. Evert A. Bancker, Jr., Co-Chairman

REGISTRATION AND CREDENTIALS

Mrs. Allen H. Bunce, Chairman
Mrs. D. R. Longino, Co-Chairman
Mrs. E. L. Askren, Jr.
Mrs. Guy H. Adams
Mrs. Jeff Richardson
Mrs. J. W. Landham
Mrs. E. A. Bancker, Jr.
Mrs. Walker Jernigan
Mrs. F. Kells Boland, Jr.
Mrs. Clifton Kemper

DECORATIONS

Mrs. H. Walker Jernigan, Chairman
Mrs. B. L. Shackleford, Co-Chairman
Mrs. J. Harris Dew
Mrs. W. B. DuVall
Mrs. Mark S. Dougherty
Mrs. W. A. Kelley
Mrs. R. L. Whipple, Jr.
Mrs. James P. Hanner
Mrs. Fred B. Hodges, Jr.
Mrs. Martin T. Myers
Mrs. C. Dixon Fowler
Mrs. Scott L. Tarplee

PAGES

Mrs. John R. McCain, Chairman
Mrs. Sam A. Wilkins, Jr. Co-Chairman

Mrs. Napier Burson, Jr.
Mrs. William M. Lester
Mrs. Albert A. Rayle, Jr.
Mrs. August B. Turner
Mrs. J. Gordon Brackett
Mrs. William A. Hopkins

TELEPHONE

Mrs. William J. Pendergrast, Chairman
Mrs. Gregory W. Bateman, Co-Chairman
Mrs. J. Frank Arthur
Mrs. James J. Clark
Mrs. Kimsey E. Foster
Mrs. Charles H. Huguley, Jr.
Mrs. John L. Jacobs
Mrs. Linton Smith
Mrs. Robert H. Stephenson
Mrs. Ben R. Thebaut
Mrs. W. P. Warner, Jr.
Mrs. Julian Q. Watters
Mrs. Sam A. Wilkins, Jr.
Mrs. Lawrence F. Woolley

PUBLICITY

Mrs. Ted F. Leigh, Chairman
Mrs. William W. Bryan
Mrs. Lamont Henry
Mrs. Mason Lowance
Mrs. Roy W. McGee
Mrs. David Merren
Mrs. Albert A. Rayle, Jr.
Mrs. Stewart Roberts
Mrs. Edward S. Wright
Mrs. Carter Smith
Mrs. George A. Williams

EXHIBITS AND SCRAPBOOKS

Mrs. Richard Wilson, Chairman
Mrs. Albert A. Rayle, Jr., Co-Chairman
Mrs. James D. Kelly
Mrs. E. A. Bancker, Jr.
Mrs. Albert A. Rayle, Sr.
Mrs. J. Harris Dew

TIMEKEEPERS

Mrs. F. Kells Boland, Jr.
Mrs. Shelley C. Davis

TRANSPORTATION

Mrs. Reese C. Coleman, Jr., Chairman
Mrs. Henry Steadman
Mrs. Clifton Kemper
Mrs. Frank Brewer
Mrs. Edgar Dunstan
Mrs. Chris. McLouglin
Mrs. W. R. Pendergrast
Mrs. Robert W. Candler
Mrs. Robert E. Huie
Mrs. Maxwell Berry
Mrs. W. C. Waters, Jr.
Mrs. A. Worth Hobby
Mrs. T. J. Florence

HOSPITALITY

Mrs. J. K. Fancher, General Chairman

SUNDAY

Mrs. M. T. Edgerton, Chairman
Mrs. Marion Benson
Mrs. James N. Brawner, Sr.
Mrs. W. A. Selman
Mrs. C. A. Rhodes
Mrs. George W. Fuller
Mrs. H. H. Askew
Mrs. Charles H. Daniel
Mrs. Osler A. Abbott
Mrs. John T. Akin, Jr.
Mrs. Samuel A. Anderson
Mrs. Robert L. Brown
Mrs. John S. Atwater
Mrs. F. Lee Bivings
Mrs. Richard E. Boger
Mrs. Napier Burson, Jr.
Mrs. T. Luther Byrd
Mrs. Ben Hill Clifton
Mrs. Tom McPherson
Mrs. Richard King
Mrs. Robert F. Mabon

MONDAY

Mrs. Dan Y. Sage, Chairman
Mrs. Calhoun McDougall
Mrs. Stephen T. Brown
Mrs. Murdock Equen
Mrs. Edgar H. Greene
Mrs. William M. Dunn
Mrs. Thomas P. Goodwyn
Mrs. William W. Bryan
Mrs. J. Harry Lange
Mrs. Eugene L. Daniel
Mrs. Haywood Hill
Mrs. Alvin D. Josephs
Mrs. Carter Smith
Mrs. Herschel C. Crawford
Mrs. David Hearin
Mrs. Vernon Powell
Mrs. John Mauldin

TUESDAY

Mrs. B. L. Shackleford, Chairman
Mrs. J. Harry Rogers
Mrs. John W. Turner
Mrs. D. R. Longino
Mrs. Hal M. Davison
Mrs. Shelley C. Davis
Mrs. F. Kells Boland, Jr.
Mrs. W. W. Anderson
Mrs. Olin S. Cofer
Mrs. Harold McDonald
Mrs. Jeff Richardson
Mrs. Ben R. Thebaut
Mrs. Robert Whipple, Jr.
Mrs. Lewell S. King
Mrs. Emory H. Main
Mrs. Peter Hydrick
Mrs. J. C. McMillan
Mrs. J. D. Manget, Jr.

MEMORIAL SERVICE

Mrs. Shelley Davis, Chairman
Mrs. Luther Byrd, Co-Chairman

SUPPER, "HOUSE OF DELEGATES"

Mrs. John W. Turner, Chairman
Mrs. W. L. Curtis, Co-Chairman
Mrs. Jack C. Norris
Mrs. A. O. Linch
Mrs. M. C. Pruitt
Mrs. W. G. Hamm
Mrs. Tully T. Blalock

TEA AND STYLE SHOW

Mrs. Chris. J. McLoughlin, Chairman
Mrs. Roger W. Dickson, Co-Chairman
Mrs. Alton V. Hallum
Mrs. J. P. Calhoun, Jr.
Mrs. B. Russell Burke
Mrs. Charles Rieser
Mrs. Charles S. Jones
Mrs. Don Cathcart
Mrs. B. T. Beasley
Mrs. Carl C. Aven
Mrs. Robert E. McClure
Mrs. George F. Klugh
Mrs. Walter Holmes
Mrs. C. B. Upshaw
Mrs. W. S. Dorough
Mrs. B. Hartwell Boyd
Mrs. John D. Campbell
Mrs. Rives Chalmers
Mrs. Claud P. Cobb, Jr.
Mrs. Wm. L. Funkhouser
Mrs. Charles M. Huguley, Jr.
Mrs. Charles E. Rushin

"DUTCH" SUPPER

Mrs. C. Hamblin Letton, Chairman
Mrs. John S. Atwater
Mrs. C. Raymond Arp
Mrs. John R. Lewis, Jr.
Mrs. F. P. Calhoun, Jr.
Mrs. Fred B. Hodges, Jr.

LUNCHEON, "CIVIL DEFENSE"

Mrs. Edgar M. Dunstan, Chairman

Mrs. Shelley C. Davis
Mrs. Charles E. Dowman, Sr.
Mrs. Charles Eberhart
Mrs. Joseph S. Skobba

TEA — HIGH MUSEUM OF ART

Mrs. F. Kells Boland, Jr. Chairman
Mrs. J. D. Martin, Jr.
Mrs. C. Raymond Arp
Mrs. Donald E. Beard
Mrs. Tully T. Blalock
Mrs. Robert F. Mabon
Mrs. Henry Poer
Mrs. Scott L. Tarplee
Mrs. W. G. Whitaker, Jr.
Mrs. John Funke
Mrs. Frank K. Boland, Sr.
Mrs. Herbert S. Alden
Mrs. S. Ross Brown
Mrs. Hugh Wood
Mrs. Joseph Yampolsky
Mrs. C. W. Roberts

BANQUET

Mrs. Ben Hill Clifton, Chairman

THE PROGRAM

Headquarters, Academy of Medicine

Registration

Sunday, May 11
3:00 P. M. to 4. P. M.—Atlanta Biltmore Hotel
Monday, May 12
9:00 A. M. to 11 A. M.—Academy of Medicine
Tuesday, May 13
9:00 A. M. to 11 A. M.—Academy of Medicine

Program and Entertainment

Sunday, May 11
2:00 P. M.—Joint Memorial Service with Medical Association of Georgia, Academy of Medicine
Sunday, May 11
4:00 P. M.—Executive Board Meeting
7:00 P. M.—President's Report to House of Delegates
Monday, May 12
10:00 A. M.—General Meeting

11:30 A. M.—Adjourn to hear President's Address
Dr. John W. Cline, President American Medical Association, Dr. W. F. Reavis, President, Medical Association of Georgia
4:00 P. M.—Tea and Fashion Show at Rich's Magnolia Room (Compliments of Rich's)
7:00 P. M.—Dutch Supper, Biltmore Grill and Dutch Theatre Party

Tuesday, May 13

9:30 A. M.—General Meeting
1:00 P. M.—Luncheon—Civil Defense, MAG
3:00-5:00 P. M.—Short drive, through residential sections of Atlanta, followed by informal tea at High Museum of Art
7:00 P. M.—President's Dinner. All members of Medical Association and wives are invited.

GENERAL MEETING

Academy of Medicine

Monday, May 12, 1952, 10:00 A. M.

Call to Order by the President—Mrs. J. R. S. Mays, Macon.
Invocation—Mrs. James N. Brawner, Atlanta.
Pledge of Loyalty—Mrs. L. W. Williams, Savannah, Immediate Past President.
Address of Welcome—Mrs. Walker Curtis, President, Woman's Auxiliary to the Fulton County Medical Society.
Response to Address of Welcome—Mrs. Thomas L. Ross, Jr., Macon, President, Woman's Auxiliary to the Bibb County Medical Society.
Introduction of Honor Guests and Past Presidents—Mrs. Eustace Allen, Atlanta.
Report of Advisory Committee to the Woman's Auxiliary to the Medical Association of Georgia—Dr. Ralph Chaney, Augusta, Chairman.
Address—Mr. Sid Wrightsman, Jr., Executive Secretary, Medical Association of Georgia, Atlanta.
Rules Governing Convention Procedure—Mrs. Ralph Chaney, Augusta, Parliamentarian.
Introduction of Pages—Mrs. John R. McCain, Atlanta.
Report of Executive Board.
Report of District Managers.
Report of County Presidents.
Address—Mrs. Eugene Holcombe, President Auxiliary to the Southern Medical Association, Charleston, West Virginia.
Report of Registration Committee—Mrs. Allen H. Bunce, Atlanta, Chairman of Registration.
Report of Entertainment Committee—Mrs. Evert A. Bancker, Jr., Atlanta.
Business.
Reading of Minutes.
Adjournment to attend addresses of Dr. John W. Cline, President, American Medical Association, and Dr. W. F. Reavis, President Medical Association of Georgia—Ball Room, Atlanta Biltmore Hotel.

GENERAL MEETING

Academy of Medicine

Tuesday, May 13, 1952, 9:30 A. M.

Call to Order by the President, Mrs. J. R. S. Mays, Macon.
Invocation—Mrs. Olin S. Cofer, Atlanta.
Pledge of Loyalty—Mrs. Edwin Allen, Milledgeville.
Introduction of Pages by Mrs. Sam A. Wilkins, Jr., Atlanta.
Address: Mrs. Leo Schaefer, Salina, Kansas, First Vice-President Woman's Auxiliary to the American Medical Association.
Report of Meeting of Woman's Auxiliary to the American Medical Association—Mrs. Murdock Equen, Atlanta.
Report of Meeting of Woman's Auxiliary to the Southern Medical Association—Mrs. W. G. Elliott, Cuthbert, Councilor.
Address: Dr. C. F. Holton, President-Elect, Medical Association of Georgia, Savannah.
Report of Officers.



MRS. J. R. S. MAYS
Macon
President 1951-1952

Report of Auditing Committee.
Report of Resolutions Committee.
Report of Registration Committee.
Report of Awards Committee:
Achievement—Mrs. C. J. Roper, Jasper.
Scrapbook and Exhibit—Mrs. Dan Jardine, Douglas.
Brawner Cup—Mrs. L. W. Williams, Savannah.
Report of Courtesy Committee.
Business.
Report of Nominating Committee.
Election of Officers.
Presentation of President's Pin to Retiring President—Mrs. Joseph Yampolsky, Atlanta.
Announcements by the President—Mrs. Ralph Fowler, Marietta.
Adjournment.

Post-Convention Board Meeting

Mrs. Ralph Fowler, Marietta, President—Breakfast, Wednesday, May 14, 9:30 A. M.—Atlanta Woman's Club.

RULES TO GOVERN THE CONVENTION

1. To gain recognition, a delegate is requested to rise, address the chair, give her name and the name of her auxiliary.

2. No delegate shall speak more than twice on the same subject, and is limited to two minutes each time.

3. Reports shall not be read from Auxiliaries which are not represented by delegates but shall be filed with the secretary.

4. All original motions on resolutions shall be made by submitting two copies; one to the Resolutions Committee, and one to the Recording Secretary.

5. Reports of delegates and district managers are limited to two minutes.

6. No one is entitled to vote before she is registered.

7. All persons appearing on the program must be seated near the platform when the session opens.

8. Badges must be worn by members of the voting body during all general sessions of the convention.

9. Delegates' privileges are not transferable.

Whispering conversations greatly retard the business of the meeting; order must be maintained at all times. Please be prompt. Meetings will begin promptly at the time announced. Reports must conform to the time allotted.

PLEDGE

"I pledge my loyalty and devotion to the "Woman's Auxiliary to the Medical Association of Georgia." I will support its activities, protect its reputation, and ever sustain its high ideals.

COLLECT

"Keep us, O God, from pettiness; let us be large in thought, word and deed. Let us be done with fault-finding, and leave off self-seeking. May we put away pretense, and meet each other face to face, without self-pity and without prejudice.

May we never be hasty in judgment, and always generous. Let us take time for all things; make us to grow calm, serene, gentle.

Teach us to put into action our better impulses, straightforward and unafraid. Grant that we may realize it is the little things that create differences; but in the big things of life we are one.

And may we strive to teach and to know the great, common Woman's heart of us all, and O, Lord God, let us not forget to be kind."

Minutes of the Regular Bimonthly Meeting, Executive Committee of Council of the MAG

Academy of Medicine, Atlanta
April 9, 1952

Present were: Drs. W. G. Elliott, W. F. Reavis, D. Lloyd Wood, and David Henry Poer.

The following action taken:

1. Conferred with Mr. Phil Cawthon and Mr. Harold Parker from the State Department of Public Welfare in regard to physical examinations to be done by physicians for applicants for financial assistance on account of being totally and permanently disabled. This is a new classification making a total of four (old age, needy children, and the blind). The following suggestions were agreed upon:

(a) The physical examination form should be simple. Where special information or examinations are required the State Department of Public Welfare would use additional forms for this purpose.

(b) The fee for the physician will be $7.50.

(c) Liaison Committee composed of Drs. Ben R. Thebaut, Chairman; O. E. Hanes, and Sterling Jernigan, all of Atlanta, will act for the Association with the State Department of Public Welfare in handling all details concerning medical problems.

(d) That examinations shall be done by qualified members of the Medical Association of Georgia or the Georgia State Medical Association of Physicians and Pharmacists only.

2. Conferred with a committee from the Georgia State Medical Association of Physicians and Pharmacists and agreed upon recommendations to be made to the House of Delegates in May.

3. Approved plans for a subscription dinner to be given for the House of Delegates at the Academy of Medicine, Sunday 6 P. M., May 11.

4. Approved invitations to four medical students from Emory University School of Medicine and the Medical College of Georgia to attend meetings of the House of Delegates as observers during the Annual Session. Also the distribution of extra copies of *The Journal* to each medical school without cost.

5. Approved change in By-Laws to require annual reports of committees to be sent in to this office 30 days in advance of the Annual Session (Chapter IX, Sec. 2).

6. Assisted President Reavis in selection of Reference Committees of the House of Delegates as follows:

No. 1. Committee on Credentials: Ralph H. Chaney, Augusta, Chairman; Fred H. Simonton, Chickamauga; Eugene M. Flowers, Tifton.

No. 2. Committee on Reports of Officers: Thomas W. Goodwin, Augusta, Chairman; W. P. Stoner, Sylvester; A. G. Little, Jr., Valdosta.

No. 3. Committee on Scientific Work: George R. Dillinger, Thomasville, Chairman; Warren M. Gilbert, Rome; George H. Alexander, Forsyth.

No. 4. Committee on Public Policy and Legislation: C. L. Ayers, Toccoa, Chairman; Paul T. Russell, Albany; Charles Eberhart, Atlanta.

No. 5. Committee on Economics: J. D. Martin, Jr., Atlanta, Chairman; Marcus Mashburn, Sr., Cumming; J. M. Byne, Jr., Waynesboro.

No. 6. Committee on Miscellaneous Business: W. L. Pomeroy, Waycross, Chairman; John L. Elliott, Savannah; C. H. Richardson, Jr., Macon.

News and Information

SOCIETIES

South Georgia Medical Society at its last meeting installed as its new officers: Drs. J. F. Mixson, Jr., president; G. J. Austin, vice-president; A. G. Little, Jr., secretary-treasurer and delegate to the Medical Association of Georgia annual session, and Fred N. Clements, alternate delegate. Dr. Clements is from Adel, the others from Valdosta.

Tenth District Medical Society at its February 28 meeting at the Athens Country Club presented a symposium on heart disease in cooperation with the Georgia Heart Association. Dr. David R. Thomas, Jr., of Augusta, president of the society, presided at the meeting.

Speakers and their subjects were as follows: "Clinical Diagnosis of Congenital Heart Disease," Dr. Harry T. Harper, Jr., clinical professor of medicine at the Medical College of Georgia and president of the Georgia Heart Association; "Atherosclerosis," Dr. Philip Bondy, assistant professor of medicine and instructor in physiology, Emory University School of Medicine; "Rheumatic Fever," Dr. Max Michael, Jr., assistant professor of medicine at Emory and chief of medical service, Lawson Veterans Hospital; "Recent Advances in Cardiac Surgery," Dr. Osler Abbott, assistant professor of clinical surgery (thoracic) at Emory.

Gordon County Medical Society at its meeting on February 5 at the Rooker Hotel, Calhoun, elected as its president Dr. Lewis Lang, of Calhoun. Chosen as vice-president was Dr. Byron H. Steele, of Fairmount, and as secretary-treasurer, Dr. Bill Purcell. Dr. Lang was designated to represent the society at the MAG sessions in Atlanta.

Laurens County Medical Society met at Dublin on March 20 to hear Dr. Edward F. Parker, of Charleston, S. C., speak on "The Methods of Diagnosis of Intra-Thoracic Disease."

Ware County Medical Society at its March 6 meeting made plans to assist in the Red Cross Bloodmobile program when the bloodmobile visited Waycross early in April. Members of the society volunteered to remain on duty at the First Baptist Church during the hours blood donations were being received. Waycross physicians who volunteered to serve were Drs. W. F. Reavis, Lovick Pierce, H. Ansley Seaman, W. B. Bates, W. C. Calhoun, H. T. Adkins and J. F. Hooker.

PERSONALS

Dr. C. C. Aven, Atlanta, addressed the Chatham County Tuberculosis Association at Savannah March 27 on, "Legislation for the Control of Tuberculosis."

Dr. John D. Campbell, Atlanta, addressed the Southeastern Society of Neurology and Psychiatry at Charleston, S. C., March 3 on, "The Future of Psychiatry."

Dr. Sandy B. Carter, Atlanta, announces the reremoval of his office to 28 Eighth Street, N. E.

Dr. Ellison R. Cook, III, Savannah, addressed a meeting of the Ludowici High School Parent-Teacher Association in March in the interest of the Georgia Heart Association drive.

Dr. John L. Elliott, Savannah, spoke before the Reidsville Parent-Teacher Association on February 21 in behalf of the Georgia Heart Association campaign.

Dr. A. V. Gafford has become associated with Dr. George B. Smith and Dr. Tom Harbin at the Harbin Clinic, Rome. Their practice is limited to ophthalmology and otolaryngology.

Dr. Hartwell Joiner, Gainesville, in March was elected president of the Gainesville Rotary Club. He will take office July 1.

Dr. Frederic Vatnar Kristoff has become associated in the practice of neurological surgery with Drs. Exum Walker, William W. Moore and James R. Simpson at the Neuroclinic, 133 Doctors Building, Atlanta. Dr. Kristoff is a diplomate of the American Board of Neurological Surgery.

Dr. A. H. Letton, Atlanta, has been certified by the American Board of Surgery.

Dr. and Mrs. W. Frank McKemie, Albany, are parents of a son, William Frank, Jr., born February 5 at Phoebe Putney Hospital, Albany.

Dr. Robert F. Mabon, Atlanta, announces the removal of his office to 803 Medical Arts Building.

Dr. Lester Neville, of Dillard, was honored at a surprise party given at Rabun Gap-Nacoochee School on February 22 by citizens of the community in honor of the service he has rendered during the past 41 years. He and Mrs. Neville were given a silver service and a scrapbook.

Dr. Thomas E. Oden, Blackshear, who is 75 years old and has practiced medicine more than 50 years, was the subject of a complimentary feature article in a recent issue of the Blackshear *Times.*

Dr. David Henry Poer, Atlanta, secretary-treasurer of the Medical Association of Georgia, delivered the Crawford Long Day address at the University of Georgia, Athens, on March 31.

Dr. Harold M. Smith, Savannah, has been elected to fellowship in the American Academy of General Practice.

Dr. Charley K. Wall, Thomasville, in March was appointed by Governor Herman Talmadge to fill the unexpired term of the late Dr. Steve P. Kenyon, Dawson, as a member of the State Board of Medical Examiners.

Dr. Neal F. Yeomans announces the opening of offices for the practice of radiology at 229 Bunn Building, Waycross.

DEATHS

BROWN: *Dr. Herman Dobbs Brown,* Summerville, died in a Trion hospital January 7 after practicing for 39 years in Chattooga County. Born in 1885, he was graduated in 1910 from the University of Tennessee College of Medicine, served his internship at Memphis (Tenn.) General Hospital, and did postgraduate work at Bellevue Hospital, New York.

COLLIER: *Dr. Thomas Jefferson Collier, Sr.,* 77, pioneer Atlanta anesthetist, died March 10. Born in Atlanta, he was graduated from Atlanta Medical College, now Emory University School of Medicine. Was the first anesthetist at old Wesley Memorial Hospital and was anesthetist at Piedmont Hospital for 45 years before his retirement two years ago. Past president of the American Association of Anesthesiology.

HUCKABY: *Dr. A. H. Huckaby,* who had practiced medicine in Griffin since 1905, died March 18. Born in Douglas County, he moved to Griffin in his youth. Attended Medical College of Georgia.

MORGAN: *Dr. David Emmett Morgan,* 73, died March 20 after a year's illness in LaGrange, where he had lived almost his entire life. A 1906 graduate of the Atlanta College of Physicians and Surgeons, now Emory University School of Medicine.

RHODES: *Dr. William James Rhodes,* 94, died March 10 at his home in Louisville after an extended illness. Until his death he was the oldest living alumnus of the Medical College of Georgia, and he was believed to be the oldest citizen of Louisville. A lifelong resident of that city, he was born in the old Bostick house, which is believed to be the oldest building standing in Louisville. Had retired several years ago.

SPOONER: *Dr. John Ira Spooner, Sr.,* 68, died at his Donalsonville home March 11 after a long illness. A native of Donalsonville, he was graduated from the Tulane University School of Medicine. Although he retired from active practice several years ago he had continued to carry on extensive farming activities.

ANNOUNCEMENTS

Mount Sinai Hospital of Greater Miami (Fla.) announces its Second Annual Seminar on Recent Advances in Diagnosis and Treatment to be held at the Delano Hotel, Miami Beach, May 22-24.

The *Michael Reese Hospital Postgraduate School,* Chicago, Ill., is offering the following courses: (1) "Surgery — Indications, Pre- and Postoperative Care," Apr. 14-18; (2) "Clinical Dermatology—Refresher Course in Diseases of the Skin for General Practitioners," Apr. 21-25; (3) "Diseases of the Endocrines—Physiology and Diagnostic Methods," Apr. 28-May 9; (4) "Recent Advances in Internal Medicine," May 12-24; (5) "Recent Advances in Pediatrics—Diagnostic and Therapeutic Measures," May 26-31."

The General Practice Group of the *University of* Tennessee has established a postgraduate clinical

training program for general practitioners which has been approved by the American Academy of General Practice. It is designed for the general practitioner on an individual basis, according to his individual needs. One week to one month of training is offered, and no fee is charged. Those wishing to participate or desiring further information may write: General Practice Office, University of Tennessee, Memphis.

LETTERS

Griffin, Ga.
March 13, 1952

To the Editor:

I want to thank you for the excellent article on the opening of the Barnesville-Lamar County Health Center and Maternity Shelter which appeared in the February issue of the JOURNAL.

It is awfully nice of you to give us this coverage and we hope you will continue your contacts with us.

With best personal regards, I am

Sincerely yours,
JOHN H. VENABLE, M.D.
Commissioner of Health

Atlanta, Georgia
February 27, 1952

To the Editor:

Once or twice during my operation of this hospital I have had to appeal to the doctors of Georgia to help me obtain pupil nurses. We have reached this stage today: not only this hospital but all of the hospitals I know of in Georgia are in desperate need of nurses. We need at least 300 pupil nurses and we now have 181, many of whom are to graduate soon and will be out looking for other positions.

As you know, a great number of nurses are in the Army uniform and there is a large group of nurses who are in doctors' offices and other positions in the hospitals.

Our position most likely is not any more desperate than that of other hospitals but we have no influence to get nurses, such as the religious hospitals do.

I, therefore, feel it my duty to ask you to share some of this great need with us. This hospital, as you know, has grown and grown and still grows. Our Obstetrical Department surpasses any in the South. We are short of nurses in that department. I think the highest number of babies we have had in any twenty-four hours was twenty-eight. We average around 500 a month.

I am writing now about this tragic condition to ask you if it is possible to influence any young women, you will get them to go into training. We ask that you not only send them to our hospital but to the other hospitals as well, because they are in just as much need. We have several hundred beds in our hospital and in addition we have the responsibility of the Jesse Parker Williams Hospital. We need now at least 150 pupil nurses. You have, I know, many opportunities to advise girls what to do. I know that you are familiar with our hospital and the work it is doing. Unless we can get some nurses or train some nurses our hospital and many other hospitals in Georgia will have to curtail our work—many of them closing from one to three floors. This would be a great tragedy as the demand of the sick is so great, greater than I have ever known.

You have always been so helpful and gracious in helping us obtain pupil nurses when the demand was not so great so any influence you may use to help us with pupil nurses or any graduates you may know of—send them back into the stream of nursing. We would appreciate it greatly.

DR. L. C. FISCHER
President-Treasurer
Crawford W. Long Memorial Hospital

Barnesville, Ga.
March 6, 1952

To the Editor:

Personally and as chairman of the Lamar County Board of Health I appreciate the nice article about the Barnesville Center in this issue of the JOURNAL, and want to commend you for your excellent editorial, "Barnesville Maternity Shelter, A Step in the Right Direction." It is undoubtedly the clearest and finest discussion of the subject I have ever read.

The entire staff joins me in thanking you for our courtesy, and with best wishes and kindest regards, I am

Cordially yours,
JOHN CORRY, M.D.

Oklahoma City, Okla.
March 5, 1952

To the Editor:

Congratulations upon the wonderful improvements you and your staff have made in the JOURNAL of the Medical Association of Georgia.

Hoping to see you when I come to Atlanta, I am

Sincerely,
LEWIS J. MOORMAN, M.D.
Editor in Chief
The Journal of the
Oklahoma State Medical Association

Milledgeville, Georgia
April 4, 1952

To the Editor:

I regret that I have not written you in regard to your editorial,* but I have not been able to get around to it. There is some information that I would like to have published in the *Journal* as early as possible.

For over two years we have been admitting cases for a thirty day period of observation and treatment

*(In regard to improved and more economical treatment of the mentally ill in Georgia).

on the certificate of a physician, a statement signed by the three nearest relatives that they wish the patient admitted, and the payment of $20.00 maintenance. A Legislative Act permitted us to do this in case the hospital was not overcrowded. In the 1952 Session of the Legislature an Act was passed to permit voluntary admissions to the Milledgeville State Hospital and it has been put into effect with the following regulations:

The patients must be able to comprehend what they are doing and sign a form, in the hospital admission room, to the effect that they realize or comprehend what they are doing and are voluntarily signing themselves into the Milledgeville State Hospital and giving permission for any treatment the staff deems advisable. They, or the family, also agree to pay $50.00 a month, in advance, for maintenance. In addition to this there must be a certificate from a physician stating that the patient needs treatment at the Milledgeville State Hospital. The fee for maintenance has been established temporarily at $50.00 per month, because that is nearer what it costs to maintain patients here. It may be necessary to increase this maintenance fee in the future. Because of this Act permitting voluntary commitments and because we are overcrowded, the observation case admissions have been stopped.

At the present time there are three means of being admitted to the Milledgeville State Hospital. First, the permanent commitment by Court of Ordinary and the commission composed of the county physician, another physician, and the county attorney; second, temporary commitment by which a patient may be held at the State Hospital until the commitment may be heard; third, by voluntary commitment, as outlined above.

With highest personal regards, I am

Sincerely yours,
T. G. Peacock, M.D.
Superintendent
Milledgeville State Hospital

BOOKS

REVIEWS

Psychosomatic Gynecology: Including Problems of Obstetrical Care. William S. Kroger, M. D., Assistant Clinical Professor of Obstetrics and Gynecology, Chicago Medical School; and S. Charles Freed, M.D., Adjunct in Medicine, Mount Zion Hospital, San Francisco. 503 pages. Philadelphia and London; W. B. Saunders Company, 1951.

According to the authors the purpose of this volume is to stress the importance of emotional factors in the etiology of female disorders. They have compiled and correlated the data from numerous articles published in recent years relative to the psychosomatic aspects of gynecology and obstetrics, evaluating the significance of many common symptoms according to psychodynamic concepts. To this data from the literature they have added results of their own experience. A Gynecologic Foreword by Dr. J. P. Greenhill and a Psychiatric Foreword by Dr. Flanders Dunbar help to emphasize the importance of emotional problems in the etiology of gynecologic symptoms.

The book is divided into five parts. Part I deals with the psychosomatic aspects of the fetus and infant. The maternal-fetal relationship is considered in the light of adverse modification of prenatal environment such as maternal nutrition, oxygen supply of the fetus, maternal-fetal endocrine functions, the process of birth and other stimuli which might alter the inherited characteristics of an individual. Then follows an excellent discussion of the relationship of early psychosexual development to gynecologic disorders especially the psychogynecic problems associated with puberty, adolesence and early adult life.

The chapters in Part II are devoted to the psychosomatic aspects of the mother during pregnancy emphasizing the importance of the obstetrician's role in the psychologic preparation of the patient for childbirth and motherhood. One chapter is on the much discussed problem of psychologic and physiologic aspects of analgesia and anesthesia with description of Read's principles and the authors' method of "suggestive relaxation" or hypnosis in labor. They contend that a better interpersonal relationship between physician and mother can be used to reduce the amount of analgesia and anesthesia. Adequate emphasis is placed on the psychodynamics of hyperemesis gravidarum, the possible psychogenic aspects of preeclampsia and eclampsia, pica (desire for the unusual), heartburn in pregnancy, salivation and lactation.

In Part III a modern and practical correlation is made of the neuroendocrine mechanisms and the psychosomatic aspects of the various menstrual dysfunctions. Of interest is a review of the reactions termed the "General Adaptation Syndrome" and the "Alarm Reaction"; the activity of the pituitary to produce the adrenotropic hormone and in turn the production of the adrenal corticosteriods; suppression of the gonadotropic and lactogenic hormones of the anterior lobe; mobilization of the body defenses by the "alarm reaction"; and, the relationship between the autonomic nervous system, the endocrine glands, physiologic responses, the emotions and behavior. With such knowledge it is less difficult to understand and to treat many common complaints of women and in particular, various menstrual dysfunctions (dysmenorrhea, amenorrhea, menorrhagia, premenstrual tension and headaches, pseudocyesis, etc.) which are not explained by organic or endocrine disturbances alone. With the easily understood and readable in-

formation in the first three parts of the book one is given an excellent basic foundation for the interpretation and treatment of such common psychosomatic problems as frigidity, vaginismus, dyspareunia, low back pain, pelvic pain, obesity, the menopause, etc., as described in Part IV. In addition to the discussions on each topic, Part V describes the various methods of diagnosis and treatment, stressing the importance of psychogenic factors as revealed by an adequate history. The authors list the important topics which should be covered in taking a gynecologic history so as to include pertinent data concerning one's family background and relations, personal history, sexual, marital and social adjustment, economic status, personality characteristics and emotional development. The psychiatrically oriented gynecologist will formulate the significant data and determine the plan of treatment. For those less experienced it is suggested that the need for psychiatric consultation be recognized.

This book fills a great gap in the large field of gynecologic literature. It gives in a clear, concise but thorough manner the value of a broad psychodynamic concept of some of the most frequent and serious complaints with which women are concerned and which physicians in almost all specialties are called on to evaluate and treat. It should prove not only helpful to physicians but in turn to the many women whose psychosomatic or psychogynecic disturbance simulates organic disease to the extent that prolonged and various treatments or several surgical adventures have been experienced without relief because the emotional disturbance or personality deviation responsible for the "organ language" ("organ recital") was not understood or even recognized.

The arrangement of the text is good and the language and terminology should be understood easily by those who do not have psychiatric training.

The references are listed according to individual topics and are quite complete.

James N. Brawner, Jr., M.D.

Untoward Reactions of Cortisone and ACTH, Vincent J. Derbes, M.D., and Thomas E. Weiss, M.D. Springfield, Charles C. Thomas, 1951.

This is a badly needed subject not too well handled. The physiological review of ACTH and cortisone is necessarily sketchy but also inaccurate. Many known facts are eliminated from the book while considerable theoretical and experimental material of uncertain value is presented. It is not always clear whether cortisone or ACTH or both produce the effects. Facts are presented in mass for the reader to evaluate without any real critical appraisal by the authors. Lack of emphasis makes it difficult to determine the relative frequency of the reactions. No note is made about the value of sodium restriction in preventing negative nitrogen balance and potassium loss. No treatment is suggested for convulsions. Potassium is not advocated for the mental reactions and it certainly deserves a try. The reviewer has treated about 55 patients with these drugs employing a 200 mg. sodium diet and no serious reactions have occurred. He has observed a somewhat larger series of patients in whom sodium restriction was practiced but not as rigidly. The latter had a fairly high percentage of reactions including mental ones.

Despite the above criticisms, those who are using cortisone and ACTH should be familiar with the material in this book. —A. J. Merrill, M.D.

Standard Nomenclature of Diseases and Operations: A new edition of the Standard Nomenclature of Diseases and Operations has recently been published by the American Medical Association.

The wide acceptance of a standard nomenclature, since its first printing in 1932, by all of the important medical societies and associations in the United States and by such a large number of hospitals is significant evidence of its value to medicine.

The failure to employ, in published articles, a standard, generally accepted name for a disease is productive not only of confusion but of great loss of time and energy by those attempting to review the literature concerning a certain disease.

Perhaps one of the main reasons for lack of a keener interest by the medical profession in Nomenclature is a lack of understanding of the methods employed in listing and selecting the names for the diseases found in the Standard Nomenclature.

It is not at all difficult to find the accepted term for any known disease. Toward the back of the Nomenclature there is an index or alphabetical listing of the various terms (names of diseases) which have been accepted. The various organs or parts of the body have been included also, and under the organs (liver, kidney, etc.) and parts of the body (abdomen, skin, etc.) are entered the diseases of those organs or parts. Here you will find the diagnostic term you may wish to use.

The digits you find in the Nomenclature can be completely ignored by the Clinician. They are intended to be used only by record clerks in large clinics or institutions where brevity in recording diagnoses is essential. For ordinary use of the Nomenclature it is best to disregard the numerical listing.

In selecting the names of the diseases certain plans had to be drawn up and agreed upon to permit, as far as possible, the employment of a uniform method. These accepted plans are called the Etiological Categories or Classifications and are listed at the front of the book.

If you are interested solely in looking up the accepted term for a diagnosis, you need only consult the Disease Index. But if you have a reason for looking up the names of all diseases that have been reported to have occurred in a certain part or organ of the body, then, you will be interested in consulting the diagnoses which are listed in the body of the book under the various anatomical divisions and which are there separated into groups under each of the etiological classifications; you find entered under the different organs or parts all of the diseases which have been reported and accepted as involving that part or organ.

You may wish to consult the "Etiological Classifications" to discover which terms have been accepted and included in the Nomenclature, say, for example, for New Growths. If you will look in the Etiological Classification, at the first of the book, you will see entered all of the terms which have been chosen for all recognized new growths. You will observe that the sarcomas and carcinomas, for example, are not grouped together under those heads but are entered under the different parts in which those growths have been found to develop. Also, in the Disease Index you will find the carcinomas listed under that heading; the adenocarcinomas are listed separately as, of course, are the sarcomas, lipomas, etc.

The Nomenclature of Operations is at the back of the book and includes in the alphabetical listing of operations, not only the approved names of the procedures but, also, the names of most of the organs and parts of the body and under them the names of the operations for that region.

If it were possible to make the articles, which are now being published in the current literature in such large numbers, conform to the Standard Nomenclature and at the same time indicate clearly in the title of the article what the article is about, it would simplify enormously the editing of the Index Medicus and of any other index of medical literature as well as great facilitating the work of an author in making an extensive search of the literature on almost any subject.

MONTAGUE L. BOYD, M.D.

ROSENAU PREVENTIVE MEDICINE AND HYGIENE. Edited by Kenneth F. Maxcy, M.D., Dr. P. H., Professor of Epidemiology, The Johns Hopkins University School of Hygiene and Public Health. Seventh edition. Cloth. $14.00. Pp. 1462, with illustrations. Appleton-Century-Crofts, Inc., New York, 1951.

This book, first published in 1913, was recognized immediately as the classic in its field: it went through six editions in 22 years! Just before World War II Dr. Maxcy accepted Dr. Rosenau's invitation to bring it up to date again: with the aid of twenty-six collaborators, many from the Hopkins, Dr. Maxcy has produced a new work worthy in every way of the earlier editions in their day.

A hundred years ago half the persons in the United States were under 20 years of age; now less than a third are. The proportion of persons 45 to 64 years of age has doubled, and the proportion of those over 65 is more than tripled. The practice of geriatrics will require a lot of the profession's time, and soon there will be "specialists" in this field.

If the present knowledge as regards diphtheria (we still have children dying of diphtheritic myocarditis in Georgia), syphilis, rheumatic fever and other infectious agents, however, were effectively applied, heart disease as a cause of death and disability in those under 45 would be largely eliminated.

To the average doctor the care of the patient who consults him with some ailment (preferably organic) is the important thing in life. While this attitude is certainly not to be deprecated, the physician's responsibility should not end there: he should, like the obstetrician and the pediatrician, encourage apparently healthy people to have routine overhaulings, and he should exert himself in many other ways to promote the health of the public. While he may continue to practice good medicine on his private patients without purchasing Rosenau, he will be able to practice better medicine and to be a better informed and therefore more useful medical citizen if he is able to consult this Seventh Edition at will,—and he will enjoy doing so.

—L. M. BLACKFORD, M. D.

A TEXTBOOK OF CLINICAL NEUROLOGY: By Israel S. Wechsler, M.D. 7th Edition, W. B. Saunders Company, 1952.

This textbook is presented in very readable print, is well organized and the various subjects are accompanied by good references.

It serves well for a quick orientation in clinical neurology; but too often important findings are lost in a host of less specific symptoms and signs, through lack of emphasis—or may be completely ignored.

As examples: In the diagnosis of combined degeneration of the cord the author mentions the importance of "the primary anemia with its achlorhydria" (it is well known that severe cord changes may occur without the anemia)—and he does not mention the appearance of the tongue.

This book would bring no comfort to one seeking help in determining the cause of cervico-brachial pain. More than a page is devoted to the discussion of cervical ribs and scalenus anticus syndrome, but offers little practical help in determining that in these conditions the plexus is compressed in the region of the first rib—and cervical disc injuries are not mentioned in conjunction with pain in this area.

Platybasia is dismissed in two sentences; and without indicating when it should be suspected.

These examples might be multiplied, but serve to indicate some of the shortcomings of the book.

—RICHARD B. WILSON, M.D.

THE UNITED STATES PUBLIC HEALTH SERVICE — 1798-1950: By R. C. Williams, M.D.

Terror no longer strikes the great cities when a case of yellow fever or bubonic plague is found. Typhoid fever and diphtheria no longer take their toll from each family. Pellagra is no longer considered to be an incurable, infectious disease. Even leprosy has lost much of its stigma. The story of how these and many other changes in American medicine came about and the men whose dedicated efforts made them possible form the basis for Dr. Williams' book.

July 16, 1798, the Fifth Congress, meeting at Philadelphia, passed an act for the relief of sick and disabled seamen. The bill established the Marine Hospital Service under the Secretary of the Treasury and provided for the collection of twenty cents per month

from each seaman. The following year the act was amended to extend the benefits to the officers and men of the Navy. Dr. Thomas Welsh of Boston was appointed by President Adams as the first medical officer of the Marine Hospital Service and was placed in charge of the work of the Service in Boston, where he served until 1802. The story of the establishment of hospitals in the seaports of the eastern coast is an interesting facet of early American history. The regulations of the Marine Hospital in Boston in 1800 provide an unusual contrast to modern hospital practice. The diet table required that each patient on full diet be issued "1 pound fresh meat, 2 gills rice or 4 gills Indian meal, 1 gill molasses or 8 gills milk, and 1 pound of bread" per day. From 1807 to the opening of the Massachusetts General Hospital in 1821, the Marine Hospital in Boston was one of the sources of clinical material for the students attending lectures at Harvard Medical School.

From a small group of appointed physicians charged with the responsibility of providing medical care for sick and disabled seamen has grown the United States Public Health Service. In 1917 the commissioned corps consisted of 187 Medical officers. By 1950, the corps had grown to 1038 medical officers and 1114 commissioned officers in related fields. This growth has been necessitated by greatly expanded responsibilities. Congress has increased the medical care program to include foreign seamen, the Coast Guard, U. S. Coast and Geodetic Survey, seamen of the Army Transport Service, Government employees injured in line of duty, and officers of the Public Health Service. When available, medical care is provided for dependents of Coast Guard, Coast and Geodetic Survey and Public Health Service. Since 1921 beneficiaries of the Veterans Administration have been admitted on a reimbursable basis. The Service maintains two hospitals for the treatment of narcotic addicts and one for the treatment of patients with leprosy. The medical staffs of the other Government agencies such as Bureau of Prisons and the Bureau of Indian Affairs are supplied by the Public Health Service. In all, the Service operates 24 hospitals, 122 out-patient offices, and maintains 8,170 hospital beds.

From the early efforts in the control of epidemic diseases has grown the Bureau of State Services with responsibility of working with the State Health Departments in many fields. Control of Tuberculosis, venereal disease, communicable disease, promotion of local health programs, industrial hygiene, health education, nursing and dental health are all part of the work of the Service. Another extremely important function is that of the National Office of Vital Statistics. A recent addition has been the control of water pollution.

From a small one-room Hygienic Laboratory in 1887 has developed the National Institutes of Health, which constitute one of the world's finest centers for basic research into the cause, prevention, diagnosis and treatment of disease. Within recent years, the emphasis has increased in the fields of chronic diseases which are now the greatest causes of disability and death. There are institutes in the fields of microbiology, cancer, heart, dental research, mental health, arthritis and metabolic diseases, and neurological disease and blindness. These institutes not only carry out basic research but also administer the extensive Public Health Service grants and fellowships program in support of research in medical schools and colleges.

Dr. Williams has carefully compiled and recorded a history of the origin, evolution, organization and activities of the Public Health Service covering a period of one hundred and fifty-two years. It is pleasant to the reader to find many detailed accounts of individual efforts and accomplishments in spite of the broad scope of the book. The material included is carefully documented, and the text is livened by many excellent and unusual illustrations. The record of progress in the control and prevention of specific diseases and the stories of the dedicated lives that made such a record possible, represent a medical triumph of which the Service and entire profession may be justly proud.

This volume, while necessarily long, proves easy reading and should be informative to all medical men whose field of interest include public health or the history of American medicine. Medical libraries will certainly welcome it to their shelves. To those who have served in any capacity with the Public Health Service, it's value as a personal volume and a source of pride cannot be estimated.

—C. W. Applewhite, M.D.

Textbook of Refraction. By Edwin Forbes Tait, M.D., Ph.D., Philadelphia. W. B. Saunders Company, 1951. 418 pages, 95 illustrations. Price: $8.00.

Presenting the subject of clinical refraction of the eye in a manner designed for direct application, Dr. Tait has brought together material previously found scattered throughout the ophthalmic literature and has added some important personal contributions.

The subject matter of physical and geometric optics has been purposely omitted from the text. Ocular anatomy and physiology are presented only as they apply to refraction.

The first half of Dr. Tait's book deals with the concepts and physiologic aspects of the various ametropias and of binocular functions.

Following certain preliminary considerations, the topics discussed include hyperopia, myopia, astigmia, presbyopia, aphakia, anisometropia, aniseikonia, and amblyopia. Ocular reflexes such as accommodation, binocular balance, vergence mechanisms, heterophoria and heterotropia are next considered.

The remainder of the book contains clear descriptions of the methods of refraction and a summarized system for recording and interpreting data.

The objective steps in refraction include keratometry and skiametry, static and dynamic. The important examinations utilizing subjective responses of the patient are given proper emphasis as are the methods for measuring binocular coordination under various induced stimuli.

Dr. Tait's two most important original contributions to the subject are in the field of binocular balances at the near point and dynamic skiametry. Ocular vergences at distance and near and their relationships to physiological positions of rest are lucidly discussed. The necessity for testing and evaluating binocular functions is stressed, and indeed a refractive examination without the so-called muscle studies is never adequate or complete. Observations made on thousands of patients have been analyzed regarding accommodation-convergence relationships. The use of dynamic skiametry is explained and integrated with other aspects of refraction.

The *Textbook of Refraction* should prove to be not only a guide for resident trainees but a stimulating reference for practitioners who desire to improve their refractive technics and results.

—Curtis D. Benton, Jr., M.D.

BOOKS RECEIVED

Surgery and the Endocrine System—Physiologic Response to Surgical Trauma—Operative Management—Operative Management of Endocrine Dysfunction: By James D. Hardy, M.D., F.A.C.S., Assistant Professor of Surgery, University of Tennessee Medical College. 153 pages with 43 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $5.00.

A Textbook of Orthopedics with a Section on Neurology in Orthopedics: By M. Beckett Howorth, M.D., Clinical Professor of Orthopedic Surgery, New York University Post-Graduate Medical School. In association with: Fritz J. Cramer, M.D., Donovan J. McCune, M.D., A. Wilbur Duryee, M.D., J. William Littler, M.D., Walter A. Thompson, M.D. 1110 pages with 463 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $16.00.

The Clinical Use of Fluid and Electrolyte: By John H. Bland, M.D., Assistant Professor of Medicine, University of Vermont College of Medicine. 259 pages with 75 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $6.50.

Rheumatic Diseases—Based on the Proceedings of The Seventh International Congress on Rheumatic Diseases. Prepared by The Committee on Publications of the American Rheumatism Association: Charles H. Slocumb, M.D., Chairman. 449 pages with 126 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $12.00.

Prescription for Medical Writing—A Useful Guide to Principles and Practice of Effective Scientific Writing and Illustration: By Edwin P. Jordan, M.D., and Willard C. Shepard. 112 pages with 26 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $2.50.

AUXILIARY

Mrs. J. R. S. Mays, president of the Woman's Auxiliary to the Medical Association of Georgia entertained members of her executive board at a luncheon at the Idle Hour Club in Macon on February 27.

After the luncheon, to which the past presidents of the organization were invited as well as board members, the board held a business session to make plans for the annual convention in Atlanta in May.

Those invited to attend the luncheon and meeting were Mrs. James N. Brawner, who was first president of the state Auxiliary; Mrs. Eustace Allen, a past president of the national Auxiliary; Mrs. C. W. Roberts, Mrs. Marion Benson, Mrs. Olin S. Cofer, Mrs. Murdock Equen, Mrs. M. T. Edgerton, Mrs. Edgar Dunstan, Mrs. B. H. Clifton, Mrs. Harry Rogers, Mrs. Shelley Davis, all of Atlanta.

Mrs. Ralph Fowler, president-elect, Marietta; Mrs. Ralph Chaney, Mrs. R. C. McGahee, Augusta; Mrs. Leo Smith, Waycross; Mrs. Virgil Williams, Griffin; Mrs. C. J. Roper, Jasper; Mrs. W. G. Elliott, Cuthbert; Mrs. W. P. Stoner, Sylvester; Mrs. Bon Durham, Americus; Mrs. Lee Howard, Mrs. L. W. Williams, Savannah; Mrs. R. W. Bradford, Milledgeville; Mrs. Joe Arrendale, Cornelia; Mrs. Charles Henry, Clarkesville; Mrs. L. H. Wolff, Columbus; Mrs. Lon King, Mrs. C. C. Harrold, Mrs. C. C. Hinton, Mrs. Rhea Richardson and Mrs. Milford Hatcher, all of Macon.

Bibb County Auxiliary at its meeting of March 11 followed its yearly practice of singling out for special recognition the work of a member of the Bibb County Medical Society. Chosen to receive the honor this year was Dr. J. B. Kay, of Byron, who was the subject of a paper presented at this meeting by Mrs. Ernest Corn.

Dr. Kay, who has practiced in the Byron area for 33 years, is a charter member of the American Academy of General Practice and served in 1950 as president of the Georgia unit of the organization. He has been recognized often for initiating progressive procedures in rural health programs. Though Dr. Kay himself was unable to attend the meeting of the Bibb Auxiliary, his wife and his daughter, Mrs. Edgar Duke, of Fort Valley, were present, as were several Byron friends of the physician.

Hostesses to the meeting were Mrs. Holloway Bush, Mrs. Edmund Brannen, Mrs. E. C. McMillan and Mrs. Ed Roe Stamps.

Doctors' Day was celebrated by the Bibb Auxiliary on March 27. On that day Auxiliary members visited the physicians' offices and gave the doctors red carnations. That evening a dinner and square dance were held at Idle Hour Country Club.

Cobb County Auxiliary held a luncheon meeting

The Association

Addendum to the report of the February 10 meeting of the Committee on Constitution and By-Laws of the Medical Association of Georgia as published in the March Issue of THE JOURNAL:

By special mail vote on March 20, the Committee on Constitution and By-Laws unanimously approved amendment to *Chapter I Membership, Section 7* of the By-Laws as follows: (Additional phraseology to existing text appears in italics.)

"Sec. 7. Life Members. A life membership may be granted by the House of Delegates, upon the recommendation of the component county society, to any physician who has had not less than forty years of active membership in the Association, *or has passed his seventieth birthday.* He (is) *shall* not *be* subject to the payment of dues."

on March 12 at the Smyrna home of Mrs. W. C. Mitchell, with Mrs. Hugh Colquitt and Mrs. Charles Garland serving as associate hostesses. Business centered around plans for the annual observance on March 27 of Doctors' Day, and Mrs. Alfred Colquitt, Jr., appointed arrangements chairman. (On March 27 the physicians were honored by the Auxiliary with a buffet barbecue at the Marietta Country Club.)

Mrs. Mary Adkins, director of nursing services for the Greater Atlanta Red Cross chapter, addressed the Cobb group on methods of organizing an instructors' course in home nursing.

Others attending the Cobb meeting were: Mesdames G. O. Allen, Leonard L. Welch, E. A. Musarra, Herbert Fowler, Murl Hagood, Peter Inglis, William H. Benson, Jr., Earl Benson, Ralph Fowler, Bruce Burleigh, John F. Busch, Jr., Luke Garrett, Jr., F. B. Clark, Remer Clark, and a new member, Mrs. R. C. Behrens.

Dougherty County Auxiliary at its March 5 luncheon meeting at Davis Brothers Restaurant, Albany, elected as its officers for 1952-53 Mrs. Edward S. Armstrong, president; Mrs. Frank Wood, vice-president; Mrs. J. Z. McDaniel, secretary, and Mrs. Charles McCall, treasurer.

Presiding at the meeting was the retiring president, Mrs. Paul T. Russell. Mrs. T. L. Berg served as chairman of the nominating committee.

Chief speaker at the meeting was Mrs. J. R. S. Mays, of Macon, state Auxiliary president, who outlined the objectives of the organization and discussed the work of the American Medical Education Foundation.

Muscogee County Auxiliary has as its new officers Mrs. Dave Berman, president; Mrs. W. L. Cooke, secretary, and Mrs. George Hutto, treasurer. They were introduced at the meeting of the group held on March 19 at the Woman's Club in Columbus.

Speaking at the meeting was Dr. George Hutto, who discussed the civil defense program and asked that members of the Auxiliary keep informed and volunteer for services in which they have had special training. The members voted to entertain their husbands at a Doctors' Day dinner at Lake Pines on March 30, and to change their meeting date to the third Wednesday of each month, except in June, July, August and December.

Richmond County Auxiliary sponsored a public panel discussion on the costs of medical care which was held February 26 at the Augusta Annex of the Veterans Administration. The program was designed to tell by whom and at what price, if any, low-cost and free medical care can be obtained in Richmond County.

Acting as moderator was Dr. David Thomas, of Augusta. Representatives of all services, clinics, and educational and informational programs in Augusta were invited to be present and to answer questions when called upon.

Speakers included: Dr. Luther H. Wolff, of Columbus, chairman of the Georgia chapter of the American College of Surgeons and president of the board of directors of Physicians Service, Inc.; Dr. Stephen W. Brown, president of the Richmond County Medical Society; Dr. David Henry Poer, of Atlanta, secretary-treasurer of the Medical Association of Georgia; and Sid Wrightsman, Jr., of Atlanta, executive secretary of the MAG.

It was reported at the Auxiliary meeting at the Augusta Country Club on March 18 that the medical-care program was a success. At this meeting, the members heard Mrs. A. W. Miller give a paper on "Women in Medicine" and welcomed as new members Mrs. George Lacy, Mrs. Thomas Jackson and Mrs. Seymour Friedman.

Mrs. Ralph Chaney, Mrs. Perry Volpitto and Mrs. Nathan De Vaughn were chosen to serve as the organization's nominating committee. The group heard an appeal from A. D. Willard, chairman of the local American Red Cross chapter, to be a sponsor of the Bloodmobile program, and voted to accept the responsibility.

102nd Annual Session, Medical Association of Georgia, May 11-14, Atlanta Biltmore Hotel

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI MAY, 1952 NUMBER 5

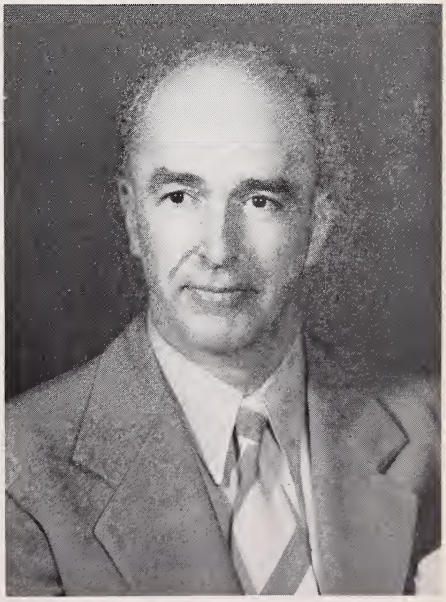
Editorials

Your New
PRESIDENT-ELECT

On the last day of the session 490 or 56 per cent of the registered members exercised their right to vote and selected Dr. William Pickens Harbin, Jr. to be President of the Association beginning with the Annual Session in 1953. No better choice could have been made than this young and prominent practitioner from our neighboring city of Rome, in the Seventh District.

Born into a medical family in 1906, and surrounded by many physicians as brothers, cousins, uncles, and even in-laws, he received his medical education at Emory University School of Medicine, graduating in 1930. In 1908 his father and uncle, Drs. William Pickens Harbin and Robert M. Harbin, founded the well-known Harbin Hospital in Rome, renamed The Harbin Clinic in 1948, and their sons have carried on the medical tradition throughout the years. Dr. Harbin went on to the Presbyterian Hospital, Chicago, for an internship and further training in internal medicine, returning to Rome in 1932 to begin the practice of medicine. He is now associated with his brothers, Drs. Lester and Tom Harbin, his cousin, Dr. Robert Harbin, his brother-in-law, Dr. Warren Gilbert, and several other physicians. Another cousin, Dr. Maxwell Harbin, remained in Cleveland as Associate Professor of Orthopedic Surgery at the Western University School of Medicine.

Dr. Harbin's chief interest has always been his family and home. He and his wife, the former Miss Elizabeth Warner, of Rome, are the parents of four attractive daughters ranging in age from twelve to



WILLIAM PICKENS HARBIN, JR., M.D.
Rome
President-Elect 1952-1953

three years. Hunting and fishing are his principle hobbies, and he keeps a kennel of five dogs, always ready to take up a likely scent or participate in a field trial.

A past-president of both the Floyd County Medical Society and the Seventh District Medical Society, Dr. Harbin served the Seventh District for 12 years as a member of the State Board of Health and has always taken a leading part in medical and civic affairs in his county and city. He has served as president of the Floyd County Tuberculosis Association since its organization, and is a Fellow of the American College of Physicians. With Dr. Harbin as President, we can be assured of a fresh and intelligent viewpoint and the necessary performance to advance us along the road of progress.

The SPECIALIST *and* HOUSE CALLS

A general practitioner was called recently at about 9:00 P.M. by a frantic mother whose twelve year old son had undergone a tonsillectomy the previous day. The child was complaining bitterly of sore throat and his temperature had risen to 104°F. The general practitioner, who had never seen the child, suggested that the mother call the surgeon who had performed the operation, and have him come to see the boy. She explained that she had called him but that she was told that he "did not make house calls". He suggested that she bring the child to his office the next day. This mother was deeply hurt by the attitude of the ear, nose and throat specialist, for it was obvious to her that, although he had accepted a good fee for the operation the day before, he had no real interest in the welfare of her son. She was, therefore, seeking help elsewhere.

Probably no doctors especially care to make house calls. Such calls are time-consuming, they take the doctor away from his family, they are frequently unnecessary, and the doctor does not have the benefit of his office equipment and laboratory facilities. Nevertheless, there are many times when it is absolutely necessary that the physician call on his patient in the home. The fact that a doctor is a specialist does not in any way relieve him of that responsibility. Indeed, he is often the only one who can be of real help in certain cases, and this makes it even more imperative that he go.

It is hoped that for the good of the medical profession, no physician will have a fixed policy of "no house calls". When it is clearly his duty to do so, as in the above-cited case, whether he be a surgeon obstetrician, orthopedist, ophthalmologist, internist, or any other type of Specialist, the doctor must go to his patient wherever he may be at whatever time of day or night he may call.

Let's not impose on the general practitioners; let's all make our fair share of the house calls.

—Henry H. Tift, M.D.

Diagnosis of CHOLECYSTIC DISEASE

The essentialness of a discriminating account of the patient's present illness is never seen to better advantage than in the diagnosis of cholecystic disease.

Currently, there is an unfortunate tendency, on the part of many physicians, to exclude a diagnosis of biliary dysfunction on the basis of a "negative report" of the Graham test. This practice appears to result from assumption that the test is sensitive and that it is as revealing when reported normal as when reported abnormal. This is much more than the author of the test, or its more experienced users, would claim.

The test was conceived and developed around the normal physiology of the gallbladder as an organ for storage and concentration of bile. It was offered as an aid to diagnosis, not as a substitute for the history and other study of the case. Deservedly, it has come to be a proper item in examination for cholecystic disease. When clearly abnormal, it offers very

staunch corroborative evidence of deranged function and, by inference, of disease. Even when there is room for some doubt of the result, it lends weight to an otherwise compatible clinical syndrome.

Too often, however, serious errors are made in the opposite direction. The test is ordered, if not on hunch, then after nothing more than the briefest and most superficial questioning and the report is allowed to settle the whole matter, for or against a diseased structure. More commonly, a clearly suggestive history of cholecystic disease is readily discarded because the radiologist reports, in effect, a normally functioning gallbladder.

It is not a sensitive test. This is evidenced by the finding, at operation, of variable grades of chronic inflammatory change after multiple Graham procedures were reported as normal. Indeed, it is now clear that well advanced changes usually exist by the time the test is rendered abnormal, and that the simple clinical features have indicated the diagnosis, with accuracy, long before this point is reached. Aside from the error of a missed diagnosis and the patient's continued suffering and expense, a considerable injustice is done the radiologist. It places upon him the responsibility for excluding the diagnosis when such responsibility belongs, clearly, to the attending physician.

With acknowledgment of infrequent exceptions, in suspected cholecystic disease, it is safe to say that the positive and negative evidence of a thoughtful history, should always take precedence over a report of normal Graham study.

—W. Edward Storey, M.D.

WAS OUR 1952 ANNUAL SESSION A SUCCESS?

Did YOUR Delegate Do His Duty?

The 102nd Annual Session of the Medical Association of Georgia is now history and those of us who are interested in its future should pause and take stock in our accomplishments and failures. In the Army this practice was called a "critique," and followed all maneuvers and new procedures.

Numerically, we achieved great success, in that well over a thousand doctors attended and approximately 900 took time to register. Taking into account wives, exhibitors, guests, and other related personnel, a grand total of 1500 people were attracted to the meeting, making it the largest session ever held by our Association.

The many new features of the program were well received, particularly the section meetings, each of which featured an outstanding guest speaker. Already, many of the specialty groups have started plans for a similar arrangement at the 1953 Session, and shortly the Program Committee will be called on to begin initial groundwork on next year's general program. The Memorial Service on Sunday, May 11, was impressive and its success indicated that a solution to a longstanding problem finally has been found with reference to future Sessions of the Association. The presentation of awards, 50-Year Certificates and lapel buttons during the first general session also proved appropriately advantageous.

Despite record-breaking attendance, a complaint from the commercial exhibitors now appears to be justified in that too few doctors manifested enough interest to visit the technical exhibits and register with the exhibitors. When one considers that such exhibitors represent pharmaceutical and supply houses which make it their business to present new products and up-to-the-minute information thereon, any doctor may be assured that he will learn something worthwhile by visiting all exhibits. Furthermore, it should be known by now that without the financial assistance of our technical exhibitors, the Association would find it impossible to put on an annual meeting. The sole alternative in this case would be a sizable increase in annual membership dues.

But it was the handling of the business affairs of the Association that gave officers the most concern, an aspect of equal importance to the scientific program which was presented. This year, for the first time in the history of the Association, all matters, except the election of officers, were discussed and decided upon entirely by the House of Delegates which operated under the new Constitution and By-Laws, adopted at the 1951 Annual Session.

What were the results of this drastic action by members of the Association? Did the delegates take their duties seriously and assume the responsibilities put on their shoulders in a conscientious manner?

Generally speaking, the answer to these questions in both cases was a great big NO. At no time were

there 50 per cent of the delegates in attendance, and even at the time when the President of the American Medical Association started his important address, scarcely a quorum was present. A diagnosis in this case would be difficult. It goes without saying that delegates received sufficient notices by mail prior to the meeting, including an invitation by the Fulton County Medical Society to attend a special dinner. Sunday was selected by a 90 per cent showing of hands to be the best day to begin deliberation. The volume of important business certainly warranted a better attendance, when one considers the vital decisions that were required.

The following county societies had no representation at either meeting of the House of Delegates: Appling, Banks, Bartow, Ben Hill, Blue Ridge, Brooks, Burke, Chattooga, Clayton-Fayette, Cobb, Coffee, Colquitt, Coweta, DeKalb, Dooly, Dougherty, Gordon, Gwinnett, Hart, Henry, Houston-Peach, Jackson-Barrow, Jefferson, Jenkins, Lamar, Laurens, Macon, Meriwether-Harris, Mitchell, Monroe, Montgomery, Morgan, Ocmulgee, Rabun, Rockdale, Screven, Sumter, Tattnall, Taylor, Tift, Toombs, Calhoun-Early-Miller, Liberty-Long-McIntosh, Walton and Wilcox.

Since there are 89 county medical societies, it can readily be seen that the business of the Association was handled by delegate represenation from only 45 county societies. It should be added that considerable credit is due the Past-Presidents who gave valuable assistance along with Councilors and Vice-Councilors. The best participation was by counties having large cities, which demonstrated the fact that many of the rural counties fail to accept necessary responsibility.

Several momentous decisions were made which will bring the Association further along the road of progress. These include the full support of the American Medical Education Foundation, to which the Association has pledged a $10,000.00 donation, with each member being urged to contribute no less than $10.00 annually to a medical school of his choice. In addition, a scientific membership status was set-up and made available to Negro physicians who wish to participate in the scientific activities of the Association and to become members of the American Medical Association. The Association pledged financial support to the work of the Woman's Auxiliary, as well as the Better Health Council, and the Committee on Rural Health was established on standing committee basis. A new fee schedule submitted by the Insurance Board was approved and appears in this issue.

Many important revisions were made in the Constitution and By-Laws, including the provision for a Speaker and Vice-Speaker of the House of Delegates. Perhaps these officers may come up with a method to increase both interest and attendance in future deliberations of the House of Delegates, to be much larger next year with one delegate allotted a county society for every 25 members.

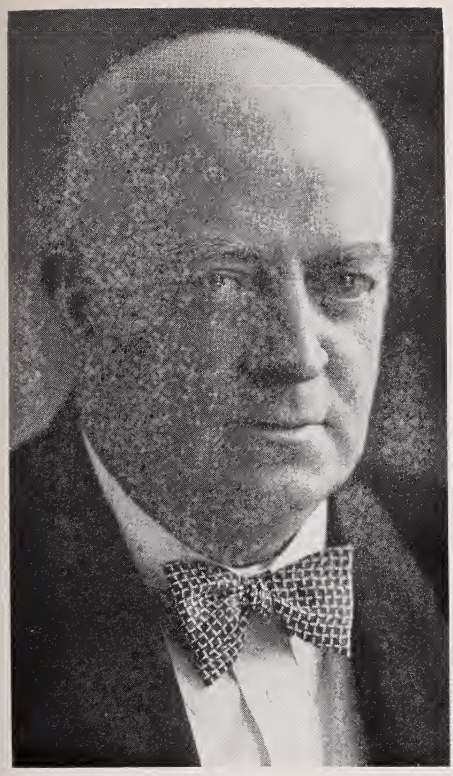
Like love for the misbehaving son, if the parents were to total up both the good and bad, it will be readily seen that the 102nd Annual Session was not such a bad meeting after all.

EUGENE EDMUND MURPHEY, M. D.

November 1, 1875 - April 13, 1952

With the death of Dr. Eugene Murphey, of Augusta, the Medical Association of Georgia has lost one of its most distinguished and versatile members. Although he lived and died in the same house to which his parents moved him in infancy, his fame and influence extended far beyond the confines of his native State.

He graduated from the Academy of Richmond County in 1891. He attended the University of Georgia in Athens, and was a member of Chi Phi Fraternity. He graduated from the Medical Department of the University of Georgia in 1898, where he was a member of Phi Rho Sigma Fraternity. He was President of the Richmond County Board of Health, and Commissioner of Health from 1908 to 1933, and since 1936 has been Commissioner Emeritus. He was President of the Medical Association of Georgia 1917 to 1918. In 1921 he was elected a Fellow in the American College of Physicians. On the establishment of the Alpha Omega Alpha Honorary Fraternity at the Medical School, he was the first graduate member elected. He was a First Lieutenant in the Medical Reserve Corps as early as 1912; was commissioned a Major in April 1917; was one of a board of three to organize a Medical Reserve in the State of Georgia; was a member of the



EUGENE EDMUND MURPHEY, M.D.

council of National Defense; was called to active service in August 1917 and served as Chief of the Medical Service, Base Hospital, Camp Gordon, Ga. He was an associate member of the American Ornithologists Union; an honorary curator of Orthinology in the Charleston Museum; and a member of the Georgia Historical Society. He had long been a member of the Benevolent Protective Order of Elks. Since 1940 he had served continuously as President of the Herald Publishing Company.

On Nov. 14, 1900 he married Miss Willie Roney of Augusta, and from that date until the time of his death she has been his dedeciated wife and devoted companion.

Doctor Murphey was first of all a great physician. His skill and diagnostic acumen were widely recognized. In the days when formal "consultations" were fashionable there were few of his colleagues who had the temerity to differ with an expressed opinion of Dr. Eugene Murphey. During the years of his active practice he was best known and best loved by his many grateful patients.

But patients have a way of dying or moving away or transferring their allegiance and it is probably as a teacher that Doctor Murphey will be best remembered. In an era when mechanical diagnostic aids were offering increasingly tempting "short cuts" to medical students, he was firm in his insistence on the use of the eyes and ears and fingers. He was at his best at those bedside clinics on patients who could not give a history of their illness. His skillful assembling of physical signs leading to a diagnossi will be well remembered by his students. Many a prominent physician in the State today remembers his discomfiture at failing at these clinics to see what should have been seen. Even after he was compelled to give up active practice he continued his teaching as long as he was able. During all the busy years of practice and teaching he always found time to listen understandingly and to give sage advice to any student asking for counsel.

To his personal friends Doctor Murphey is best remembered as a cultured and genial host. When the State Association met in Augusta the Murphey's party, in the spacious old house in which President Washington had once been a guest, was the most enjoyed and longest remembered event of the convention. And as a corollary to his charm as a host was his skill as a conversationalist. Of broad culture and of facile tongue he was equally at ease with Nicholas Murray Butler, William Lyon Phelps or the most callow medical student whose good fortune it was to be his guest. And while directing a conversational hour he always listened attentively when the other fellow was talking.

Twenty years ago, when for reasons of health he had to give up his beloved patients, he turned his talents in other directions. His life-long interest in birds became an absorbing study. For years he had been recognized as a most competent ornithologist. He had been a familiar and respected figure at the annual meeting of the American Ornithological Union. Compiled notes of his own regional birds have been published as bulletins by the Charleston Museum. His scientific medical papers gave way to exquisitely beautiful poems—not numerous but each one a brightly polished gem. In 1939 a collection of these poems was published in a thin volume titled "Wings at Dusk"—a treasured possession of those fortunate or discerning enough to have acquired it.

Those who knew Doctor Murphey best were impressed by two virtues rare in this world today. In all the twenty years of his adversity no one heard him utter one word of complaint. On the failings, the misfortunes, the weaknesses and the misdeeds of his fellow-man, he had no comment. Gossip had no part in his conversation. One of his favorite quotations—from the Aprocrypha—was "And thou hear a word, let it die in thee. Be bold! It will not burst thee".

—Irvine Phinizy, M.D.

Scientific Articles

W. F. REAVIS, M.D., Waycross

A BETTER PRACTICE OF MEDICINE

During recent years the medical profession has been thrust into the limelight more than at any time in its history. This is true largely because of the determined effort which we, as individuals, as well as members of organized medicine have made to check the spread of socialism so strongly advocated by some members of our national government.

The threat and the evils of socialism are too well known by all of us to require further discussion, but in passing let me suggest that perhaps we, as a nation, are having our attention focused too much on the fight against communism, while socialism, like some insidious disease, gnaws away at our vital organs.

It is most fitting that we as individuals exercise our rights of citizenship and make our voices heard in the shaping of our local, state, and national governments. As our distinguished President of the American Medical Association, Dr. Cline, so aptly said, "We are first citizens and then doctors". So we, as citizens, should consider it our sacred duty to express ourselves at the polls not only in matters pertaining to medicine, but in all matters pertaining to government.

Aside from the polls there are other ways in which we may do much to combat socialized medicine. Most of these have to do with our every day living and our every day practice of medicine. We, as members of the medical profession, should make every effort to provide medical care to every one at a cost that will not deprive them of normal living comforts. Our own Georgia Plan is taking care of one group of limited incomes by offering them prepayment medical care. But there are others not eligible for the Georgia Plan, for whom serious illness could impose a financial burden.

One hesitates to criticize his brother physicians, but in recent years there seems to have developed a routine procedure on the part of some doctors who do all types of laboratory work and x-ray examinations on new patients, frequently even before the patient has had a history taken and physical examination made. This practice often imposes an undue financial burden on the patient which in some cases could be avoided if proper history and physical had been obtained at the outset. There is no substitute for a careful history and a conscientious physical examination. Lest I be misunderstood, let me say now that I do not mean to underestimate the value of laboratory and x-ray facilities as an aid in diagnosis, but I feel that only by an intelligent correlation of these facilities with a history and physical are the best results obtained and unnecessary expenses avoided. This applies to hospital as well as office patients.

In addition to eliminating unnecessary laboratory and x-ray examinations, we should also avoid indiscriminate use of some of the new and expensive drugs, particularly when used empirically. Then all too frequently patients are hospitalized, not from necessity, but because of mere convenience to the doctor. All of these practices cause undue medical expense and encourage support of socialization of medicine.

In our every day life, we may be guilty of indescretions, which do not reflect credit upon the medical profession, and so often the medical profession as a whole is subjected to criticism because of the actions of a few. For instance, the income tax law is a thorn in the flesh to all of us, and we as a group have received much unfavorable publicity

President's address before the public meeting of the Medical Association of Georgia, 102nd Annual Session, Atlanta, 1952.

because of the frequency with which doctors are called on the carpet for income tax evasion. It is because of the income tax law that we doctors have realized the necessity of conducting our practice in a business-like fashion, something that was almost unheard of not too many years ago.

I would like to comment briefly on the status of our state and local medical societies. During the past year I have enjoyed traveling over the state and meeting with the various groups. It has been most interesting to observe the differences in the attitudes of the various members. Some make little effort to add anything to the society other than the payment of dues; and, too frequently, these same members are more than willing to criticize efforts of others. There are always a few in every society who carry most of the load. If we are to have better and stronger societies, there must be more active participation by members, both in the clinical programs and in the business transactions of the society. Our efforts should be directed towards doing what is best for the society as a whole and not toward what is best for a small minority group. We need to develop a more tolerant spirit toward our fellow members.

In recent years we have heard so much about Public Relations. In my opinion the best public relations any physician can practice is that of simple honesty, giving, at all times to all patients, the best professional care of which he is capable.

Finally, let me say that doctors are not such a bad lot, after all. They are not alone, friends of the sick, but by the day, are becoming more active participants in civic, county, state and national affairs. One need not go far to determine that fact these days.

Because of this, I have confidence in the continued progress of the American medical profession . . . and, believe me, I am humbly proud to be counted as a member of its ranks.

RENAL LITHIASIS:

Its Treatment and Prevention

by Increasing the Protective Urinary COLLOIDS

with HYALURONIDASE

ARTHUR J. BUTT, M.D., Pensacola, Fla.;
ERNST A. HAUSER, Ph.D., Cambridge, Mass.,
and *JOSEPH SEIFTER, M.D.*, Philadelphia, Pa.

One of the major problems in urology is that of nephrolithiasis. The medical management of calculous disease has not kept pace with the development of its surgical treatment. This is due to the fact that the nature and process of stone formation has continued to be a provoking enigma. It is almost exclusively within the last third of a century that experimental investigations concerning renal lithiasis have produced fundamental discoveries relative to etiologic factors and explained the rationale of basic therapeutic procedures.

Calculi, regardless of their location in the body, are composed of matter present in two conditions; namely, crystalline and colloidal.* Since both crystalloids and colloids enter into the composition of all true calculi, it may be assumed that both of these materials are necessary for the productoni of stone. According to our present day knowledge, a calculus may be defined as a concretion formed of crystal-

Read before the Atlanta Urological Society, Atlanta, Jan. 25, 1952.

This work was aided by a grant from Wyeth, Incorporated, Philadelphia. Dr. Seifter is director of Wyeth Institute of Applied Biochemistry. Dr. Hauser is professor of Colloid Chemistry, Massachusetts Institute of Technology, Cambridge, Mass.; Worcester Polytechnic Institute, Worcester, Mass.

*The term "colloid" is derived from two Greek words, "kolla" meaning glue and "eidos" meaning alike.

loids bound together by and incorporated in a colloidal matrix.

The vast majority of research concerning nonsurgical treatment of kidney stones has been focused upon attempts at diminishing the concentration of crystalloids excreted in the urine, or freeing crystalline material from a stone, thus causing its disintegration. These attempts to control calculus formation have not proven entirely successful, with the exception of correcting certain metabolic disorders. Our efforts have been directed toward the fascinating and relatively unexplored field of the role of protective colloids in the etiology, treatment and prevention of calculous disease.

In the sixteenth century Paracelsus expressed the opinion that a material obtained from food constituted the basic cementing substance essential to stone formation. In 1858, Rainey[1] and later Ord and Shattock[2,3] determined, by vitro studies, the principle that colloidal type matter would modify crystalline morphology. Ebstein[4], in 1884, was the first to draw attention to the importance of colloids in stone formation and he looked on stone formation as a sort of petrifaction of the organic stroma. Lichtwitz[5] and Schade[6], in 1909, confirmed the role of the protective colloids in urinary solubility. Keyser[7] concluded that experimental chemical calculosis can be explained only by the fact that such an intensive hyperexcretion of crystalloids was produced that the protective colloid could no longer handle the solution of crystals. Joly[8] stated with prescience: "The influence of colloids has hitherto been completely neglected from the point of view of treatment, but it is probable that when their action has been studied more fully, we shall be in a position to control the formation of urinary concretions to a much greater extent".

Colloids or material in a state of colloidal dispersion occupy a position between the microscopic and molecular systems. Colloidal particles are aggregates of large numbers of molecules. Their dimensions are considered to range from 0.001 micron to 1 micron (10^{-7} to 10^{-4} cm.). If the particles of a substance are reduced in size until the dimensions become submicroscopic and are distributed throughout a second medium, they develop characteristic properties attributable to the enormous surface area of the dispersed phase. It has been estimated that one gram of colloidal material in urine has a surface area of approximately 5,000 square meters. One of the most important results of this large surface is the unsaturation of ions located in the surface, causing adsorption of ions dispersed in the surrounding medium and carrying an electric charge of opposite sign. This leads to the formation of electrical charges around the particles, preventing the formation of larger aggregates.

Urine is a highly saturated solution of extremely complex composition in which electrolytes, as well as non-electrolytes, are dissolved in much higher concentration than their solubility in water would indicate. The sparingly soluble urinary salts do not, therefore, obey the ordinary laws of chemical solution. The abnormal solubility of stone-forming salts is a consequence of the presence of certain colloids in the urine, which prevent the precipitation of substances in such supersaturated solutions.

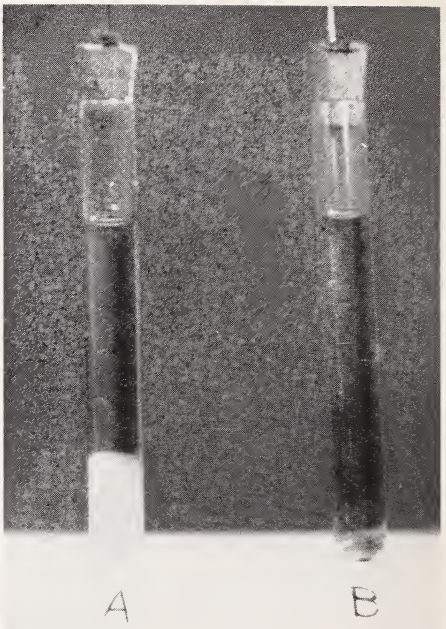


Fig. 1. Comparison of urine sample obtained from subject. A Before and B thirty minutes after parenteral injection of hyaluronidase.

During the past nine years, we have attempted to correlate by personal clinical experience, autopsies, and correspondence the incidence of stone formation among persons of different ethnic groups, religions and nationalities. From these observations, it became evident that the only common factor which applied in the majority of subjects was that of the presence or absence of protective urinary colloids in the various cases studied. In 1947, the significance of urinary colloids in relationship to stone formation was further investigated in West Florida, which is a well-recognized area of high stone incidence[9,13].

Some races are more prone to develop kidney stones than others. The Negro is relatively immune. Vermooten[14] observed that the South African Bantu Negro does not experience the formation of renal calculi. At the same time, however, he found that the white population of South Africa had renal calculi in the ratio of 1 to 460 patients admitted to hospital. Negroes in the United States are less liable to stone formation than the white race. Holmes and Coplan[15] have noted that urinary lithiasis in Negroes is rare in South Florida and that the infrequent Negro with renal stone is often a mulatto. An analysis of 300 cases of renal lithiasis observed by us during a forty-two month period in West Florida revealed that there were only 8 or 2.6 per cent who were Negroes. Of these eight, only two were "pure black".

Approximately ten per cent of patients seen by us are Negroes. Excretory radiographic studies are routinely made on all of our private and charity patients.

Calculous disease of the upper urinary tract is more common in men than in women. In our series of 300 cases of renal lithiasis, there were 196 males and 104 females, about twice as many men as women. This closely conforms to the male/female ratio in other relatively large statistical series.

With evidence that renal lithiasis is less common in the Negro race than in the white race and less common in the female sex than in the male sex, the influence of protective urinary colloids in the etiology and prevention of stone in these different groups was carried out.

Urine specimens were subjected to ultramicroscopic examination, surface tension studies, electric charge carried by the colloidal particles were determined and photoultramicrographic studies were made. Seven hundred and forty patients were investigated and from these studies it became evident that the incidence of stone in both sexes and in different ethnic groups was almost inversely proportional to the protective urinary colloids present.

It could be demonstrated that the urine of females generally showed a higher concentration of colloidal matter than did the urine of males and higher in Negroes than in white. In the urine from pregnant women, the concentration of ultramicroscopically visible colloidal particles surpassed that in the urine of non-pregnant women. Details of the method of study have been presented previously elsewhere[9 13].

Surface tension determinations were made with the pendant drop method[16] on urine of various patients, after it had been subjected to ultracentrifuging, whereby all matter visible in the ultramicroscope was removed. The results clearly demonstrated that urine of white females has a markedly higher surface tension than that of Negro females, the former averaging 60 dynes per centimeter, the latter 52 to 55 dynes per centimeter. It could also be demonstrated that the surface tension of urine of both white and Negro females decreases during pregnancy. In addition, it was interesting to note that, as seen under the ultramicroscope, there is progressive increase in the urinary content of colloidal particles with advancement of pregnancy. This would suggest that the concentration of the capillary active substance, the composition of which will still have to be determined more accurately, has passed the threshold of micelle formation.

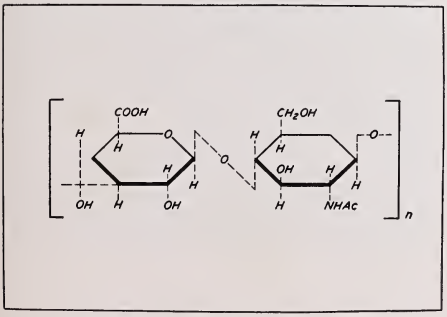


Fig. 2. Structural formula of hyaluronic acid.

Electrophoretic studies revealed that the non-centrifuged samples of urine with low surface tension had all been obtained from patients with little tendency to stone formation, such as Negroes. This seems to indicate that it is the presence of capillary-active lyophilic colloids which is responsible for this favorable condition. From a colloid-chemical point of view these results would indicate that the presence of capillary-active agents might be the predominant factor, because of their action as protective colloids and dispersing agents, forming a reversible gel in combination with the crystal micelles instead of a solid crystal of inorganic matter.

While seeking a method of physiologically increasing the protective colloids excreted in the urine, it was found that hyaluronidase (Wydase®), when mixed with physiologic saline and injected subcutaneously, appreciably acts to disperse minute particles suspended in the urine (Figure 1) and prevents stone formation in a high percentage of patients. This is due to the fact that the naturally occurring protective colloids are set up to a reversible gel, thereby preventing electrolytes present from crystallizing.

Hyaluronidase is an enzyme with a fairly high molecular weight.[17 18] Hyaluronic acid, one of the two substrates of hyaluronidase, is a complex muco-polysaccharide compound of very high molecular weight, composed of alternating units of acetyl glucosamine and glucuronic acid (Figure 2). Ultramicroscopic research has offered visual proof that hyaluronic acid acts as a peptizing agent and protective colloid. The subcutaneous injection of hyaluronidase causes the release of an excellent dispersing agent into the blood which is excreted in the urine where it enhances micelle formation and thereby preventing development of stone.

The clinical application of increasing protective urinary colloids by parenteral injection of hyaluronidase is a new concept in the treatment and prevention of renal lithiasis. The first twenty patients studied by us had multiple, bilateral and rapidly recurring renal calculi. They had passed numerous stones at regular intervals over a period of years and developed stones within a period of weeks or a few months. In these patients, no regimen of therapy had been effective in reducing the formation or reformation of stone before hyaluronidase therapy had been instituted. Subcutaneous injection of 150 turbidity reducing units (T.R.U.) of hyaluronidase mixed with 1 cc. of saline was regulated individually by observing the duration of increased colloidal activity after injection of the drug so that this protective activity was maintained at an increased level. This varied from nineteen hours to one hundred and twenty hours and the average was from twenty-four to seventy-two hours. Each case was investigated regarding all known etiological factors as relates to

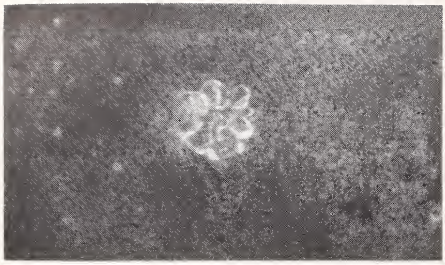


Fig. 3. Ultropak microscope X 2500. Urine sediment of white male with multiple rapidly recurring renal calculi. This shows almost complete absence of protective colloids surrounding the embryonal crystal.

stone formation. These patients have been on hyaluronidase therapy for from eleven to fourteen months and no other form of therapy to combat stone formation has been employed. In seventeen of these twenty patients (85 per cent) no new stone formation or growth of existing stones occurred, when the drug was taken properly, as is evidenced by roentgenograms taken at thirty to sixty day intervals.

An analysis of the three apparent "failures" was made. In the first patient "hyaluronidase requirements" seemed to vary markedly as the urinary protective colloid level fluctuated in bizarre patterns over a period of days. Efforts toward establishing a correct dosage of hyaluronidase closely similated attempts to establish the dosage of insulin for a very "brittle" diabetic. In this case, we subsequently learned that it is necessary to give quite large doses of hyaluronidase, 300 to 600 T.R.U. daily to maintain adequate levels.

The second patient has multiple bilateral stones. Calculus formation was controlled completely on the right side, yet stone formation continued on the left side. The right kidney drained well and was uninfected; the left kidney was hydronephrotic and badly infected.

The third patient had a solitary left hydronephrotic, badly infected kidney containing innumerable calyceal stones. Hyaluronidase therapy did not arrest stone formation. We believe that in the presence of urinary stasis, there is "aging" of the colloids, with progressive lessening of the protective properties. Obviously, hyaluronidase therapy is ineffective in pyonephrosis or when renal function is markedly decreased, the reason being that the protective colloid present in the blood is not filtered into the urine.

A second series of ten patients, all of whom were rapid stone-formers, have been observed for a period of six to ten months. This group received larger doses of hyaluronidase, averaging 300 T.R.U. every twenty-four to forty-eight hours. In nine of the ten patients (90 per cent), there has been no new stone formation or growth of existing stones, as evidenced by x-rays taken at thirty to sixty day intervals. We have noted two striking phenomena in patients who have taken large doses of hyaluronidase for a period of several months. These patients have a sense of "well being" which cannot be ascribed solely to a general improvement in health. An additional factor has come into play, the action of which is now being investigated. Also the skin becomes softer and smoother and the subcutaneous tissue more pliable. This undoubtedly is due to vast increase in hyaluronic acid, an essential component of the "ground substance", which is being produced as a result of hyaluronidase administration. Finally, our recent observations indicate that the formation of protective urinary colloids diminishes or virtually disappears during times of strong emotional stress. In these patients, the urine frequently becomes cloudy due to amorphous phosphates, with no change in the hydrogen ion concentration, whereas before the stress, the urine had been clear.

Three cases are summarized. Case 1—G.M., male, age 26; duration of symptoms five years. Passed stones composed of calcium phosphate and ammonium magnesium phosphate at intervals of every two to three months. Protective urinary colloids were extremely low (Figure 3). Roentgenograms revealed innumerable bilateral calyceal stones. Hyaluronidase

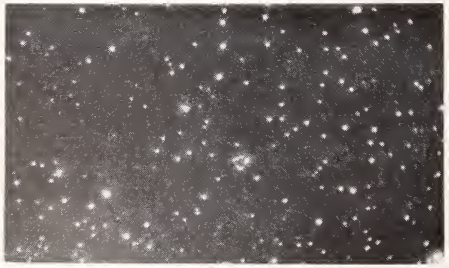


Fig. 4. Ultropak microscope X 2500. Urine specimen from same patient as shown in Figure 3 forty-eight hours after injection of 300 T.R.U. of hyaluronidase. This shows complete dispersion of material and each bit of particular matter completely surrounded by protective colloids.

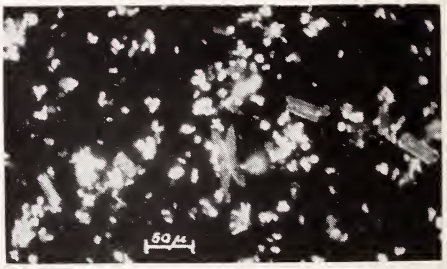


Fig. 5. Ultropak microscope X 2500. Urine sediment of white male with multiple bilateral, rapidly recurring renal calculi. Besides a few large crystals, the urine is full of solid crystal micelles which tend to aggregate and grow into stones.

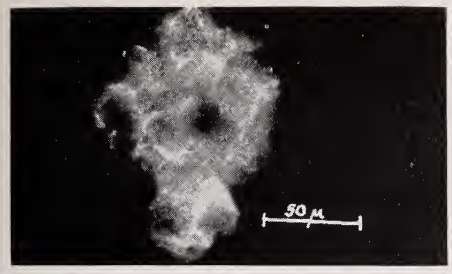


Fig. 6. Ultropak microscope X 2500. Urine specimen from same patient as shown in Figure 5 one hour after injection of 150 T.R.U. hyaluronidase. This clearly shows the rapid reaction of this medication as now the solid particles have all become the dispersed part of a jelly-like cluster.

therapy was instituted Dec. 15, 1950. X-rays taken at three to four week intervals revealed no new stones or growth of existing stones after therapy was begun. Urinary protective colloids were maintained at an elevated level (Figure 4). He has passed no new stones and has been free of symptoms since institution of treatment thirteen months ago. Urine culture negative. Serum calcium and phosphorus and urinary calcium levels were within normal limits. This case illustrates what has previously been termed an idiopathic stone former. Two other members of his family have had renal calculi. Our findings in this case show that the reason for rapid stone formation is an inherent deficiency of protective urinary colloids.

Case 2—H.G.S., male, age 34; duration of symptoms seven years. Passed stones composed of calcium phosphate and ammonium magnesium phosphate at intervals of one to five months. The degree of protective urinary colloidal activity was extremely low (Figure 5). Urine culture revealed heavy growth of staphylococcus aureus, non-urea-splitting. Roentgenograms revealed innumerable bilateral calyceal stones. Hyaluronidase therapy was instituted Oct. 2, 1950. X-rays taken at one to two months intervals revealed no new stones or growth of existing stones during the eleven months after therapy was instituted. Protective urinary colloids were maintained at elevated level (Figure 6). He has passed stones on two occasions when therapy was discontinued for three weeks each time; otherwise, he has been asymptomatic. This case is one of bilateral multiple calculi, associated with severe urinary infection. Hyaluronidase therapy effectively prevented further stone formation as long as the patient received the drug. When treatment was discontinued, stone formation and passage rapidly ensued.

Case 3—B.W.W., female, age 50; duration of symptoms twenty-five years. Passed stones composed of calcium phosphate and ammonium magnesium phosphate at intervals of one to three months. Protective urinary colloids were extremely low (Figure 7). Roentgenograms revealed bilateral calcinosis. Serum calcium 14.2. Serum phosphorus 1.9. Serum protein within normal limits. Twenty-four hour urine calcium 1.1 Gm. per cent. X-rays of the long bone revealed evidence of decalcification. She refused operation on the parathyroid adenoma. Hyaluronidase therapy was instituted Dec. 12, 1950. X-rays taken at three to four week intervals revealed no new stone or growth of existing stones after therapy was begun. Urinary protective colloids were maintained at elevated levels (Figure 8). She has passed no new stones and has been free of symptoms since institution of treatment. This case is one of hyperexcretory calcinosis due to hyperparathyroid adenoma. In this type of case, excretion of excessive amounts of crystalloids overwhelms the protective colloid mechanism and stone formation occurs. By physiologically increasing the protective colloids, stone formation can be prevented.

Summary and Conclusions

Urine is a highly saturated solution due to the presence of certain colloids. The protective action of urinary colloids is of major importance in pre-

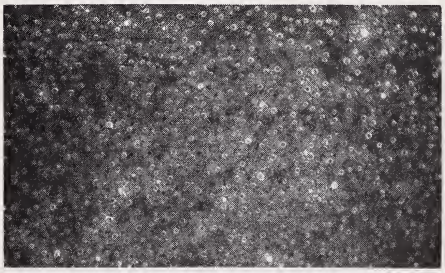


Fig. 7. Ultropak microscope X 2500. Urine specimen of white female with multiple bilateral, rapidly recurring renal calculi due to hyperparathyroidism. This shows the urine to be filled with solid crystal micelles which tend to aggregate and eventually grow into large stones. These micelles are composed almost entirely of calcium.

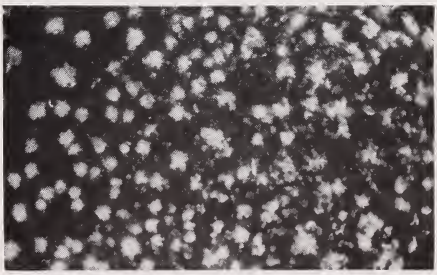


Fig. 8. Ultropak microscope X 2500. Urine specimen from same patient as shown in Figure 7 one hour after injection of 150 T.R.U. of hyaluronidase. This shows complete dispersion of micelles, each of which is fully protected by hydrophilic colloids. It is impossible for these to aggregate while this protective mechanism is present.

venting precipitation, agglomeration and conglomeration of crystalloids from a super-saturated solution.

If the concentration of such protective colloids is insufficient, stone formation begins or is accelerated. In six hundred and eighty subjects, the incidence of stone was found to be almost inversely proportional to the degree of protective urinary colloids present. Urine specimens were subjected to ultramicroscopic examination, determination of electric charge carried by the colloidal particles, determination of the surface tension, and photoultramicrographic studies.

Subcutaneous injection of hyaluronidase, mixed with physiologic saline pronouncedly increases the protective urinary colloids. The colloids are caused to set up to a gel, thereby preventing electrolytes present from crystallizing. They act as excellent dispersing agents and prevent the formation of stone.

Hyaluronidase therapy, using 150 turbidity reducing units every twenty-four to seventy-two hours, has been effective in preventing calculous formation or reformation during a period of eleven to fourteen months in eighteen of twenty patients studied, who had previously been rapid stone formers. In a second series of ten patients with rapidly forming stones, larger doses of hyaluronidase, averaging 300 turbidity reducing units every twenty-four to forty-eight hours, were given. These patients have been observed by us for periods of six to ten months. In this group, there has been no new stone formation or growth of existing stones, as evidenced by x-rays taken at thirty to sixty day intervals.

BIBLIOGRAPHY

1. Rainey, G.: Quart. J. Micr. Sc., 1858.

2. Ord, W. M.: Some Experiments Relating to the Forms Assumed by Uric Acid, St. Thomas Hosp. Reports, London 1, 335-348, 1870.

An Account of Some Experiments Relating to the Influence Exercised by Colloids Upon the Forms of Inorganic Matter, St. Thomas Hospital Reports, London 2, 1-22, 1871.

On "Molecular Coalescence" and on the Influence Exercised by Colloids Upon the Forms of Inorganic Matter, Quart. J. Micr. Sc. n. s. 12, 219-239, 1872.

On the Influence of Colloids Upon Crystalline Form and Cohesion with Observations on the Structure and Mode of Formation of Urinary and Other Calculi, London, 1879.

3. Ord, W. M., and Shattock, S. G.: On the Microscopic Structure of Urinary Calculi of Oxalate of Lime, Trans. Path. Soc., London 46, 91-132, 1895.

4. Ebstein, W.: Die Natur and Behandlung der Harnsteine, Weisbaden, 1884.

5. Lichtwitz, L., and Rosenbach, O.: Untersuchungen ueber Kolloide im Urin. Zts. f. physiol. Chem. 61, 112-118, 1909.

Lichtwitz, L.: (a) Untersuchungen ueber Kolloide im Urin. Zts. physiol. Chem. 64, 114-157, 1910; (b) Die Bildung der Harnsedimente und Harnsteine, Zts. f. Urol., 7, 810-820, 1913.

6. Schade, H.: Beitrage zur Konkrementbildung, Muench. med. Wochnschr. 56, 77-80, 1909.

7. Keyser, L. D.: The Mechanism of the Formation of the Urinary Calculi, Ann. Surg., 210-222, (Feb.) 1923; The Etiology of Urinary Lithiasis; An Experimental Study, Arch. Surg. vol. 6, 525-553, 1923.

8. Joly, J. S.: Bone and Calculous Disease of the Urinary Organs, St. Louis, C. V. Mosby Co., 1940.

9. Butt, A. J.: discussion of paper, "Some Urological Complications of Pregnancy by Drs. Coplan, Woods and Melvin. Tr. Southeastern Section, American Urological Association, 76, 1950. Role of Urinary Protective Colloids in Prevention of Urinary Calculi. Read before the Alton Ochsner Medical Foundation, Annual Fellows Meeting, New Orleans, La., (Oct. 13-14) 1950. Influence of Protective Urinary Colloids in Prevention of Renal Lithiasis. J. Florida M. A. 37:711-713 (May) 1951.

Role of Protective Urinary Colloids in Prevention of Urinary Calculi. Read at the Annual Meeting of the Southeastern Section of American Urological Assn., Memphis, Tenn., (March 7-10) 1951. To be published.

10. Butt, A. J., and Hauser, E. A.: Importance of Urinary Colloids in Kidney Stone Prevention. Presented at 25th Annual National Colloid Symposium, Cornell Univ., Ithaca, N. Y. (June 18-21) 1951. To be published.

11. Butt, A. J.; Hauser, E. A.; Seifter, J., and Perry, J. Q.: Renal Lithiasis: A New Concept Concerning Etiology, Treatment and Prevention. Presented at the Southern Medical Assn., Dallas, Tex. (Nov. 5-8) 1951. To be published Sou. M. J.

12. Butt, A. J.; Hauser, E. A., and Seifter, J.: Medical Management of Renal Lithiasis by Increasing Protective Urinary Colloids with Hyaluronidase. Read at the Fifth Annual Urologic Postgraduate Convention, Los Angeles, Calif., (Nov. 26-30) 1951. To be published California Med.

13. Butt, A. J., and Hauser, E. A.: Importance of Urinary Colloids in Kidney Stone Prevention. To be published.

14. Vermooten, V.: Occurrence of Renal Calculi and Their Possible Relation to Diet as Illustrated in South African Negro, J.A.M.A. 109: 857-859, (Sept. 11) 1937.

15. Holmes, R. J., and Coplan, M. M.: Study of the Geographic Incidence of Urolithiasis with Consideration of Etiological Factors. J. Urol. 23: 477-487, (April) 1930.

16. Andreas, J. M.; Hauser, E. A., and Tucker, W. B.: Bound Tension by Pendant Drops, J. Physiol. Chem., 42: 1001-1019, 1938.

17. Seifter, J.: Studies on the Pharmacology and Toxicology of Testicular Hyaluronidase. Ann. New York Acad. Sc. 52: 1141-1155, May, 1950.

18. Meyer, K.: The Biological Significance of Hyaluronic Acid and Hyaluronidase, Physiol. Rev. 27:335-359, 1947.

Butt-Douglas Medical Foundation, Pensacola, Fla.

PRESS COMMENT: *Undeserved Rap*

All too frequently the medical profession takes a rap when a study of the particular case will show that none was deserved. An instance of this kind occurred the other day. The man in this case had been given a world of free medical care for the past four years, including three stays in the hospital as a city patient. He refused to undergo the operation deemed necessary. A doctor was not immediately available when frantic calls were placed as the end neared and the profession took a black-eye.

A representative of the Medical Society said that in a situation where a family is unable to get their family physician or some other physician the patient should be taken to a hospital. There they will receive immediate medical attention. St. Joseph's, Candler and Central maintain 24-hour emergency service with a doctor either on duty or on call.

—Rossiter's "City Beat" Column
in the SAVANNAH MORNING NEWS

KATHLEEN BYERS, M.D., Atlanta

ANESTHESIA

for Femoral Neck and Intertrochanteric FRACTURES

Since 1935 over 3,000 anesthetics have been given at the Piedmont Hospital for open reduction of femoral neck and intertrochanteric fractures. This report is concerned with only 163 cases, while a small figure in comparison, yet it is representative of the total. The 163 cases here reported have been followed carefully over a four year period.

Open reduction with internal rotation and fixation of the femur with a Smith-Peterson nail, alone or in combination with a plate, is considered an emergency operation by the surgeons of the Piedmont Hospital and are operated upon immediately unless the physical condition of the patient contraindicates. A great majority are elderly patients and usually poor surgical risks. Prompt and careful preoperative evaluation and prepartaion for surgery by the internist has proven of most valuable assistance.

In recent years the percentage of patients in the older age groups that come to surgery has increased. It is of concern to the surgeon, internist, and anesthesiologist to give more thought to the anesthesia problems of this age group. Dripps[1] has shown that the operative mortality and incidence of complications in the older patient is less than has been generally assumed. At the same time Foldes[2] has emphasized the need for thinking in terms of the physiologic rather than the chronologic age and for reviewing the anatomical, pathologic, and pharmacologic aspects of old age.

TOTAL NUMBER OF CASES: 163

Femoral neck fractures 85
Operation: Smith Peterson Nailing
Intertrochanteric fractures 78
Operation: Smith Peterson Nail and Plate

Table 1—AGE GROUP

Femoral Neck		*Intertrochanteric*	
41 to 50	3	41 to 50	6
51 to 60	12	51 to 60	14
61 to 70	33	61 to 70	25
71 to 80	29	71 to 80	22
81 to 90	7	81 to 90	10
Over 90	1 (93)	Over 90	1 (95)

Males—21
Females 142.

From the Department of Anesthesiology, Piedmont Hospital, Atlanta.

Read before the Medical Association of Georgia in annual session, Augusta, April 20, 1951.

The majority of patients were between the ages of 60 and 80 years of age. Two patients over 90 years of age had an uneventful recovery. Out of the 163 patients, 21 were males and 142 females. The majority of the fractures occurred in the home.

Table 2—PREOPERATIVE EVALUATION
Surgical Risk

Femoral Neck	*Intertrochanteric*
A GOOD 13	A GOOD 4
B FAIR 44	B FAIR 38
C POOR 28	C POOR 36

The majority of patients were fair to poor risks. There were more poor risk patients in the intertrochanteric group.

Preoperative preparation and complications: this includes a careful history, physical examination, complete blood work, urinalysis, with special tests such as EKG and chest x-ray when indicated. A careful evaluation of the functional reserve of the important systems is done with particular reference to the cardiorenal and respiratory systems. Borderline cases of cardiac decompensation are digitalized; pulmonary infections are treated with antibiotics; and cardiovascular accidents and cerebral contusions must be ruled out. Blood transfusions are given prior to surgery where indications exists. Careful attention to the state of dehydration, nutrition, and vitamin intake is important. Such preparation may require several hours, or days, or even weeks. It is the belief of the surgeons that these patients respond better if the operation is not delayed unduly. In some instances one must await cardiac stability or for mental confusion to clear. Where the patient is unduly depressed from analgesic or sedative drugs, the operation should be delayed. The routine use of morphine for these patients must be abandoned. Many have travelled some distances before reaching the hospital and arrive exhausted and dehydrated. Good preparation will always pay dividends in the anesthetic management and postoperative course.

As shown in Table 3 most of the complications were of a cardiovascular nature (81) with 18 showing chronic myocardial damage in the EKG; 8 had old cerebral vascular accidents; 10 were digitalized preoperatively; 15 already were receiving digitalis. Arteriosclerotic heart disease was most common, with

Table 3—PREOPERATIVE COMPLICATIONS

	Patients		*Patients*
Cardiovascular disease	81	Cerebral concussion	2
On digitalis EKG evidence chronic myocardiac damage	18	Urinary disease	6
Old cerebral vascular accidents	8	Anemia	6
Pulmonary disease	20	Malnutrition	5
Arthritis	12	Dehydration	3
Diabetics	2	Fractures (others)	6
Metastatic carcinoma	2	Hepatitis	2

hypertensive heart disease second in percentage. Definite pulmonary disease was present in 20, with some having atelectasis or pneumonia on arrival at the hospital. Arthritis was present in 15 patients, anemia in 6 and malnutrition in 5 patients. Fractures of other bones was noted in 6 patients. One 80 year old patient of remarkable physical status had a fractured maxilla, mandible, tibia, fibula, radius and ulna and made an uneventful recovery. One patient had metastatic breast carcinoma with a pathological hip fracture. One patient had metastatic carcinoma of the prostate and after a prolonged hospital stay, fell in the hospital fracturing his hip. He died on the fourth postoperative day of cardiac failure and uremia.

Table 4—PREANESTHETIC MEDICATION

As a usual rule the patients under age of 60 receive pantopon gr. 1/6 or demerol 50 mg. along with atropine 1/200. Patients over age of 60 receive atropine 1/200 only.

Because of the decreased metabolic rate and less efficient liver and kidney function, drug sensitivity is usually increased in the elderly patient, and the use of depressant drugs and anesthetic agents requires special consideration. The dosage of morphine gr. ⅛ should never be exceeded. In our experience pantopon gr. 1/6 or demerol 50 mg. combined with atropine gr. 1/200 is usually considered safe. Over the age of 65, only atropine gr. 1/200 is given, as a rule. Demerol produces less depression of the respiratory system. Since the barbiturates and scopolamine may produce excitement in some of the elderly patients and tend to produce more confusion and euphoria, they should not be used in this age group. Because of the slower degree of absorption, the medication is best given one hour prior to surgery, otherwise the intravenous route is more reliable.

Table 5—ANESTHETIC AGENT COMBINATION INTRAVENOUS AND INHALATION TECHNIQUES

	Femoral Neck	*Intertrochanteric*
Pentothal-N_2O	48	49
Pentothal-C_3H_6	16	4
C_3H_6	10	2
C_3H_6-Pentothal	6	20
N_2O-Ether	4	2
Spinal	1	None
Maximal pentothal	1.20 Gms.	1.16 Gms.
Minimal pentothal	.20 Gms.	.10 Gms.
AVERAGE	.40 Gms.	.60 Gms.

Choice of Anesthetic Agent Combination

This is a subject of much debate in this age group and it is very easy to eliminate all of the anesthetic agents in some of these cases. While local and regional anesthesia has proven valuable for some groups, general anesthesia using a combination intravenous-inhalation technique has proven to be the most satisfactory. Sodium pentothal, has been found most useful in this group when used in weak solutions and small dosages. A brief discussion between surgeon and anesthetist as to the individual requirements of the case before the start of the operation can do much to smooth the course for all. A review of Table 5 shows that a majority of the anesthetic agents administered to this group were pentothal induction and maintenance on a 50:50 ratio mixture of nitrous oxide and oxygen, pentothal average amount .40 to .60 Gm. The quick, smooth and pleasant induction afforded by pentothal is of great advantage in this group, where excitement, coughing, and/or straining could prove disastrous. Maintenance with cyclopropane can be accomplished with equal safety, provided arrhythmias are absent. It is more difficult to keep a closed system in this group of edentulous patients where the face mask frequently is ill-fitting. A non-explosive agent is desirable where the electric drill and x-ray machine are being used. The semi-closed technique using nitrous oxide and oxygen is more easily used and there is less likelihood of accumulation of carbon dioxide.

Many of these patients are in considerable pain, especially upon movement. It is felt that the least amount of movement while awake is better for the patient. This is one reason why we do not favor the use of spinal anesthesia. A great number of these patients are brought to the operating room on the bed or stretcher so that they are not moved or only one time while awake. Induction is started with intravenous pentothal or cyclopropane and when sufficiently asleep, the patient is then moved to the Hawley or Albee-Comper table. While this requires several attendants and is inconvenient for the anesthesiologist, it is conducive to smooth induction by having the patient calm and painless at the beginning of induction.

Anesthesia is maintained in a very light degree. Relaxation is indicated only in the very beginning of surgery for the reduction; for the remainder of the nailing and plating the patient can be carried in analgesia, with slight arm movement or brow movement, since the cough reflex is usually depressed at this age. At the completion of the wound closure, many are awake enough to cough and clear the tracheobronchial tree in the operating room. Careful aspiration at the end of surgery and in the postoperative period is important in preventing pulmonary complications. Where ether has been used, the amount of mucus is more abundant, this being one of its chief disadvantages along with the prolonged induction phase required with the gas, oxygen, ether technique.

The arrhythmias are the most difficult complication to control. They occur with all anesthetic agents

Table 6—ANESTHETIC COMPLICATIONS

Emesis, Mucus and coughing, Arrhythmias, Fall blood pressure, and Shock have all been noted in varying percentages.

and techniques. Intravenous procaine has helped in their management as well as pronestyl.

Supportive treatment in the form of 5 per cent glucose in distilled water or whole blood is started early in the course of surgery and given slowly so as not to overload the circulation. Most patients with intertrochanteric fractures receive whole blood. This is a prophylaxis against a drop in blood pressure or shock which is undesirable in this group where a poor coronary circulation and poor cardiac reserve exists.

Table 7—DURATION OF ANESTHESIA

	Femoral Neck	*Intertrochanteric*
Shortest	25 min.	35 min.
Longest	2 hrs. 35 min.	2 hrs. 55 min.
Average	1 hr.	1 hr. 40 min.

One purpose of this report was to determine the influence of the duration of anesthesia and trauma on the operative mortality and complications. In the intertrochanteric group, where, in addition to the nail, a metal plate of varying lengths is also used, the operation is longer, more trauma takes place, and there is more blood loss than in patients with neck fractures the time difference being on an average of 40 minutes (Table 7). While neither of the two operations are extremely hazardous or prolonged for the good risk patient, it entails considerable risk in some of the poor risks. Fortunately, these patients can be maintained in a very light plane of surgical anesthesia. In some instances where there is nonunion of a fracture and a bone graft must also be used, the operation assumes a greater risk. There were two in this series both having an uneventful recovery. There were two patients who had bilateral hip fractures at different times.

Table 8—POSTOPERATIVE COMPLICATIONS

	Femoral Neck	*Intertrochanteric*
Cardiac decompensation	1	6 (POD 1-5)
Cardiac infarct	1 (POD 15)	
Pulmonary embolus	1 (POD 3)	4 (POD 2-8)
Cerebral hemorrhage		1 (POD 13)
Atelectasis		3 (POD 2-6)
Pneumonia		1
Thrombophlebitis	1 (POD 3)	6
Nausea and vomiting		1
Urinary retention	2	3
Shock (mild)		1

(POD—Postoperative Day)

The duties of the anesthesiologist extend into the postoperative period. In many instances where emergencies of a circulatory or respiratory nature arise or resuscitation is indicated, the anesthesiologist should be sought immediately. A recovery ward located close to the operating room prevents unnecessary delays. As in the preoperative period, careful medical supervision and early recognition of pulmonary complications is required. Good nursing care can do a great deal to prevent pulmonary complications, by encouraging the patient to cough, turn from side to side, and move the lower extremities to prevent development of phlebothrombosis. These patients are moved into a wheel chair as early as possible, analgesics and sedatives must be used sparingly. The use of .1 per cent procaine in 5 per cent dextrose or 5 per cent alcohol in 5 per cent dextrose for sedation, has been advocated by others for sedation in elderly patients.

A review of Table 8 shows the incidence of postoperative complications. As would be expected from the preoperative status, cardiac decompensation was the chief postoperative complication. This occurred in 7 of the patients and more often in the intertrochanteric group (6), and this took place on the first to the fifth postoperative day. Thrombophlebitis occurred in 7, 6 in intertrochanteric group, pulmonary embolism in 5, atelectasis in 3, coronary infarction 1, cerebral hemorrhage 1. Complications occurred more frequently in the intertrochanteric group where the length of a surgery averaged 40 minutes longer than in the neck group. However, the average hospital stay, as seen in Table 9 was not increased very much in this group, being 10 days for the neck fractures and 12 days for the intertrochanteric fractures. Cardiac decompensation, pulmonary embolism, thrombophlebitis and atelectasis occurred more often in the intertrochanteric fractures. A point which seems significant despite the fact that there were more poor risks in this group (see Table 2).

Table 9—HOSPITAL STAY

	Femoral Neck	*Intertrochanteric*
Shortest	6 days	7 days
Longest	6 months	6 weeks
Average	10 days	12 days

Table 10—MORTALITY PERCENTAGE

	Femoral Neck	*Intertrochanteric*
Mesenteric thrombosis	1 (POD 10)	(POD 4, 16, 30)
Cerebral thrombosis	1 (POD 13)	Pulmonary edema 3
Anesthetic deaths	None	Cerebral thrombosis
Operating room deaths	None	1 (POD 19)

(POD—POSTOPERATIVE Day.)

Mortality — Three patients died of pulmonary edema, and only one of these was in the early postoperative period. This was the patient with prostatic carcinoma aged 76. The other two were 85 and 89 years of age. The patient who died of mesenteric thrombosis was 68 years of age; the two cases of cerebral thromboses were 81 and 85 years of age.

Summary

A series of 163 patients observed over a four year period is presented. A comparison of complications and mortality between two closely related groups of fractures was made. The mortality was highest (5 per cent) in the intertrochanteric fractures and

2 per cent in the femoral neck fractures. The duration of the operation, trauma, and blood loss were considered as factors which could contribute to this difference. Some of the special considerations of the anesthesia problems were emphasized including the need for an experienced anesthesiologist. A satisfactory technique and method of handling this particular type of surgery was presented. The mortality is less than one would expect in this age group and could not be attributed to the anesthetic. There were no operating room deaths and no anesthetic deaths. With the exception of one cardiac death which occurred on the fourth postoperative day in a patient with metastatic carcinoma, the other deaths occurred in the third and fourth weeks; one occurred six weeks postoperatively of mesenteric thrombosis in a patient who was having an operation for a subsequent fracture (humerus.) Two patients in this series died of cerebral thrombosis. There is a special need for careful attention to minute details in this group of sub par patients. Close cooperation between the surgeon, the internist and the anesthesiologist is extremely important.

BIBLIOGRAPHY

1. Foldes, Francis F.: Some Problems of Geriatric Anesthesia, Anesthesiology (Nov.) 1950, vol. 11, no. 6, pp. 737-744.

2. Dripps, R. D., and Turnile, C. S.: Anesthetic Management of Aged, Pennsylvania M. J. 51:436-436 (Jan.) 1948.

3. Welch, C. S.: New England J. Med. 238:821 (June) 1948.

4. Ziffren, S. E.; Zager, L. L., and Cullen, S. C.: Geriatrics 5:252-258 (Sept.-Oct.) 1950.

5. Stuglitz, E. J.: Geriatric Medicine, The Care of the Aging and the Aged, ed. 2, Philadelphia, W. B. Saunders Company, 1949.

DISCUSSION OF PAPER, "Anesthesia for Femoral Neck and Intertrochanteric Fractures," by Dr. Kathleen Byers.

DR. PETER B. WRIGHT (Augusta):

There are one or two points that I should like to bring out. These conditions are never emergencies. If we don't take time to prepare these patients before operation we are not going to have the good results that Dr. Byers shows.

We have time to match and administer blood, and we have time to empty the stomach. These patients can be put in traction and can be kept comfortable. They can be relieved of pain, and ample time can be taken for a complete survey of the general condition of the patient, because many are in the old age group; they are very delicate, very susceptible to morphine and to demerol, and they should be given medications in very small doses, which can be repeated if necessary.

I want to stress again the point that we have plenty of time to properly study, evaluate and prepare the patient before operation.

As for the anesthetic agent, I think the choice depends upon the anesthetist because some can manage one anesthetic better than another. Open drop ether is safer in the hands of one not well experienced in anesthesia, and might be preferable to cyclopropane, nitrous oxide, pentothal or anything else. I think the anesthetic agent should be decided upon by the anesthetist's ability.

I would like to stress another point about these patients, they come from all over the State, and they usually have received a quarter grain of morphine as soon as the doctor saw the patient, and another quarter grain of morphine when they are put into the ambulance. These old folks are consequently in poor condition when they come in, so I think the first aid care, the transportation and the immediate pre-anesthetic care are far more important than the administration of the anesthetic, because we know that when the anesthetic is given the patient is properly prepared. You cannot have any set rule for handling these patients.

BACK PAIN

PAUL L. RIETH, M.D., Atlanta

Most back pain has its origin from pathology situated in the vertebral column itself. Most nerve root pain, be it sciatica or cervical radicular pain, similarly originates from pathology situated in the back. Most back pathology will, in some stage of its course, show concommitant nerve root compression symptoms.

Lesions of the vertebral column are frequently multiple. For example: symptomatic disc lesions are often associated with instability of the spine; fractures and disc lesions are frequently encountered with osteoporosis; degenerative arthritis, disc lesions, osteoporosis, and metastatic lesions can be, and often are, seen in the same individual of the older age group; fracture of bone and disc damage are usually concurrent lesions and the latter lesion, e.g., disc damage, may be the more symptomatic and chronically disabling of the two. Hence, in any study of back lesions evaluation of all pathology present is important.

Brief mention of the more frequent back lesions is indicated.

RHEUMATOID ARTHRITIS: Seen most often involving the sacroiliac and lumbar apophyseal joints initially, with progressive fusion of involved joints in a cephalad distribution. This entity is easily diagnosed after fusion has occurred, but must be borne in mind if diagnosis is to be made early in the disease or during remission. Accompanying sciatica seen early in this disease may lead to an erroneous diagnosis of herniated intervertebral disc.

HYPERTROPHIC ARTHRITIS: Usually seen in the spine along with diffuse involvement of joints. Radi-

Read before the Medical Association of Georgia in Annual Session, Augusta, April 20, 1951.

cular pain from involvement of the cervical spine and lower lumbar spine is noted. Treatment is best afforded by physical therapy modalities.

Osteoporosis: Hormonal, dietary, disuse, and vascular factors require evaluation for appropriate therapy. Support and physical therapy are adjuncts of treatment.

Traumatic Entities: Fractures of skeletal structures are usually obvious with good x-ray visualization, but serious ligamentous trauma is less obvious, and may be similarly disabling.

Disc Lesions: Probably the most prevalent spine lesion leading to serious disability. Most often seen in the mobile, lordotic lumbar and cervical regions, and of especial importance in the lowest lumbar interspaces. Treatment is conservative or surgical. Further discussion is given below.

Metastatic Lesions: Street[1] has recently shown the lumbar spine is the site of metastatic involvement in 40 per cent of all patients dying from malignant disease. Less than 50 per cent of these metastatic vertebral lesions could be detected by roentgenologic examination of the lumbar spine. Occasionally, vertebral body biopsy is helpful in the diagnosis of metastatic disease.

Primary Bone Lesions: Any one of many lesions involving bone effect the vertebral column. Special attention should be given to involvement of the axial skeleton with multiple myeloma in the older age group, and to involvement of the vertebral bodies by metastatic infectious processes secondary to pulmonary and genitourinary infectious processes.

Congenital Anomalies: Congenital variations in the skeletal structure are frequent in the lumbo-sacral region of the spine and may predispose to instability and/or disc degeneration at this level. The history is often of more importance in evaluating the anomaly than the roentgenographic findings.

Structural Abnormalities: Scoliosis is an example of this. Early detection and classification are important. Satisfactory treatment of these abnormalities is not always possible.

Postural Factors: These form a large group that appear relatively unimportant, but their importance as a contributing factor to subsequent disc degeneration and serious disability cannot be overemphasized. The postural and exercise program outlined by Williams[2] is important for both prevention and treatment of low back disabilities.

Functional Disturbances: Psychosomatic elements must be constantly evaluated. Organic pathology is often erroneously diagnosed as being a functional complaint; while tension, anxiety, and conversion states are frequently the basis of subjective complaints referable to the back and limbs.

Compensation cases cannot be expected to relate a true subjective picture of their disability until economic settlement of their claim is accomplished

Disc Lesions

Intervertebral disc lesions require special emphasis in any discussion on back pain. These lesions are more frequently encountered as the etiologic entity than any other single factor; however, they are cer-

Fig. 1. Position of flexion-traction employed for relief of pain in case of lumbar disc lesion.



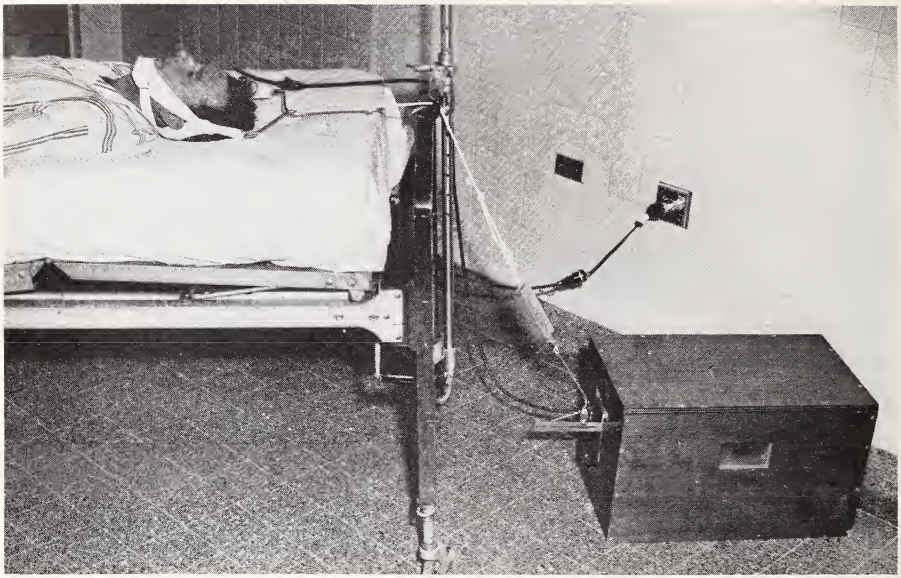


Fig. 2. Graduated and intermittent traction apparatus used by author in conservative treatment of cervical disc pain.

tainly not the causative factor in *all* cases of back pain, with or without nerve root pain.

During the past two decades disc surgery has offered more positive therapeutic aid for alleviation of serious back disability than any other method of treatment; however, it has now become obvious that disc excision alone will not suffice for the adequate treatment of all disc lesions.

Recurrent attacks of pain and disability following disc surgery are now of great enough frequency to require re-evaluation of therapeutic procedure.

Primary disc lesions that are incapacitating enough to require surgical relief should, in most cases, be treated by disc excision alone. The reported "cure rates" vary from 60 to 90 per cent. What shall be done about the 10 to 40 per cent "non-cures"? And, can any of this 10 to 40 per cent group be anticipated prior to their initial laminectomy?

Armstrong[3] has recently listed the following causes for failure in disc surgery:

1. Failure to locate the lesion.
2. Failure to recognize a double lesion at the L-4, 5 and L-5, S-1 levels.
3. Failure to deal with a bilateral lesion.
4. Subsequent further retropulsion of nuclear material.
5. Root adherence to diseased nuclear material or scar.
6. Subsequent prolapse of a previously healthy disc.
7. Permanent changes in the nerve root where operation has been delayed too long.
8. Damage to the posterior articular facets.
9. Arthritis of the intervertebral joint.
10. Surgical errors:
    a. Postoperative infection.
    b. Gross damage to the theca, the cauda, or nerve roots.

To this list should be added primary low-back instability.

Congenital anomalies and weak supporting musculature may predispose to spine instability, but not necessarily. For example, an individual with spondylolisthesis may or may not have an unstable spine, and surgery in these cases, if indicated, may be for the fundamental reason of nerve root decompression, or for stabilization, or for both. We feel that it is a mistake to perform a spine fusion operation in a case of spondylolisthesis without adequate exploration of corresponding nerve roots, for, if surgery is indicated, the patient probably has had nerve root radiation pain associated with back pain.

Our surgical concept of combined nerve root decompression and spine stabilization, which we have termed total laminectomy combined with prop-latch bone graft, is based partially upon the fundamental work of Lindblom and Rexed,[4] Swedish histopathologists, who have shown that most nerve-root compression occurs where the anatomic confines are ideally suited for compression by disc material, e.g., the postero-lateral portion of the neural canal adjacent to the intervertebral foramina.

Simple removal of intervertebral disc material will not, in all instances, decompress a nerve root; neither will spine fusion by itself, even though it be a prop-type fusion, necessarily decompress nerve roots. Either of these methods of decompression, however, will be successful in a certain percentage of cases, and fail in others.

Adequate selection of surgical procedure is now

added to the prerequisite of adequate case selection.

Traction, postural, and immobilization methods of therapy, though often palliative rather than curative, are helpful in the conservative management of symptomatic disc lesions.

Certainly not all disc cases are relieved by traction or positioning, but enough are helped, especially cervical disc cases, to warrant its widespread use before recommending surgery. In addition, a better evaluation of the patient can be made by several days observation and consideration of response to traction. Many cases thought to be true disc subjects have been found, after repeated conversations, to have a strong functional overlay—a point that could not be determined at the time of first consultation.

Some physicians feel that several days hospitalization for traction simply adds to the patient's medical expense. In reality, if surgery is averted, the patient realizes a great saving.

Positioning, in lumbar disc lesions, may offer more relief than traction. Usually, flexion of the lumbar spine, hips, and knees, combined with traction is most effectual. (Fig. 1).

Cervical disc lesions respond better to controlled intermittent traction in a neutral position. (Fig. 2). Positioning alone is often ineffectual.

Traction and positioning allow for more effectual surgical screening, as well as providing an adjunct in therapy.

Summary

Lesions of the vertebral column itself are the most frequent cause of back pain.

Causative factors are frequently multiple.

Any of the lesions briefly mentioned may give rise to signs and symptoms of nerve root compression.

Intervertebral disc protrusion can be treated by conservative or surgical methods. A trial of conservative measures serves as an effectual screen in selection of cases requiring surgical treatment.

A combined operation, total laminectomy and prop-latch type spine fusion, is recommended for recurrent disc lesions, or disc lesions associated with joint instability.

BIBLIOGRAPHY

1. Street, D.: Personal communication.
2. Williams, Paul C.: The Painful Back, in Principles of Internal Medicine, pp. 53-74.
3. Armstrong, J. R.: The Causes of Unsatisfactory Results From the Operative Treatment of Lumbar Disc Lesions, J. Bone & Joint Surg. 33-B:31-35.
4. Lindblom, K., and Rexed, Bror: Spinal Nerve Injury in Dorso-Lateral Protrusions of Lumbar Discs, Journal of Neurosurg. 5:413-432.

Discussion of paper, "Back Pain," by Dr. Rieth.

DR. F. BERT BROWN (Savannah):

I was very interested in Dr. Rieth's comments and pictures of spine fusions. I would like to ask him a question—how long after the spine fusion does he allow the patient, who does heavy work, to return to his work after the operation?

I have been using a little more mobilization than was shown in the motion picture, in the form of a low back brace, and in most instances I have even used a low plaster cast for about four weeks, and then followed it with the brace afterwards. I have been keeping people who do heavy labor away from their work for two to three months. Dr. Rieth's experience with that has been that he can get these people back to work in a shorter time.

Concerning the other phases of low back pain, many of these patients do not require operation and fusion, and we usually treat most of them with conservative means for a reasonable time, and then resort to fusion. The method pictured by Dr. Rieth is one that I have used most commonly, and I find that it is far more satisfactory than the Albee procedure, or using the long iliac rest of the legs.

Closing discussion of paper, "Back Pain," by Dr. Rieth.

DR. PAUL L. RIETH (Emory University): In answer to Dr. Brown's question on the time of return to work, it depends entirely, of course, upon the type of work. One doctor sitting in this room returned to his duties as a physician in seven weeks. Those doing very arduous work will require from four to six months, and even eight months before returning to their work.

PRESS COMMENT: *WHO Needs Any Writer?*

By DR. ERNEST THOMPSON

We have a story just like you see in the Atlanta papers. You know, where the child needs surgery, and the big hearted organization puts up some money, and the surgeon and the hospital reduce their charges, and the child gets what he needs, and everybody is happy. We have a story like that if we just had somebody to write it.

The boy is twelve years old, and he's smart, and he's nice. He has had a double hernia (rupture) all his life. His folks simply don't have the money to have it fixed.

Mr. Tant, Principal of Church Street School, first called the case to my attention. I mentioned it to E. M. Tribble at the drug store one Sunday morning when I should have been at Sunday School. Tribble says right quick, "Give me the facts in writing and I will get the Elks to take care of it." I did and he did. In no time at all the Elks gave enough money to make the operation possible, with some concession on the part of the surgeon and the hospital.

If you know Tribble you know he is a big man in many ways. A big man with a big heart. And Elk Tribble and the other Elks must be a mighty fine organization.

Dr. George Hammond and his Sunday School class got into the act too with pajamas and slippers and other things the boy needs while at the hospital.

All in all it's a very nice affair. The boy was operated on Wednesday. He's happy. Everybody's happy. It's a story just like we see in the Atlanta papers. We just need somebody to write it.

WALTON TRIBUNE (Monroe)

The Role of the Greater OCCIPITAL NERVE *in the Production of* HEADACHE

ERNEST G. EDWARDS, M.D., Savannah

It has long been known that various lesions in and about the cervical spine could be causative factors in headache, especially the so-called occipital type headaches. In addition to pathological lesions in the suboccipital region and cervical spine, various underlying lesions referred to as myalgia, fibrositis and myofibrositis, have been thought to account for as much as two-fifths of all headaches.

Naturally many other causes may account for headaches, among which may be some common extracranial causes such as prolonged eye strain, infections in and about the nasal pharynx and sinuses, inner ear infections, mastoiditis, and carious or abscessed teeth. Various intracranial lesions such as brain tumors, abscesses, aneurisms in the circle of Willis, etc. may account for headaches.

Wolff[4] and other workers feel that vascular disturbances in and about the cranium may be definite etiological factors. They have pointed out areas of sensitivity in the extracranial arteries, large venous sinuses, and meningeal structures closely adjacent to these large vessels. In the cervical spine, pathological lesions including fractures of the vertebral bodies, laminal arches and facets, herniated intervertebral discs, arthritis, and intrinsic spinal cord lesions including tumors, can all account for headache.

In this article, attention is called to a particular type of headache, originating in the upper cervical spine and post-occipital region, radiating to the head, temporal and frontal areas, and often to the eye, on one side. This type of headache often corresponds anatomically with the course of the greater occipital nerve in the back of the head.

Many of these patients, when seen, will have had eye, ear, nose and throat, and dental examinations. Also, he has had an orthopedic examination and numerous x-rays of the cervical spine, in an attempt to find a causative lesion. Often the patient has received physiotherapy, including diathermy to the cervical spine, and immobilization in a Thomas collar, with no benefit.

Formerly member of the Department of Orthopedic Surgery, University of Virginia Hospital, Charlottesville, Va.

The patient complains of a dull, aching pain present in the back of the head and suboccipital region, which radiates up the back of the head, sometimes to one eye, and usually located on one side. The symptoms may have been present for from a few days to a few months.

At times, the pain may be sharp and lancinating, and a tingling sensation up the back of the head is often described. In addition to these symptoms, the patient may have an area of hyperesthesia along the course of the nerve. Lacrimation of the eye on the affected side may be present.

Any type of prolonged concentration, worry and strain may cause the symptoms to increase. Sudden turning of the head, exposure to drafts and cold may bring on the symptoms.

Examination of the patient frequently reveals a tender area to palpation in the suboccipital region over the lateral mass of the first and second cervical vertebrae. Rotation of the head on the spine often increases the symptoms. At times, definite areas of hyperesthesia may be demonstrated in the post-occipital region, temporal region, and upper cervical spine. X-ray examination of the cervical spine is usually negative, but may disclose a reversal of the normal lordotic curve. Occasionally, arthritic changes and narrowing of a disc space may be present, and the symptoms ascribed to this. However, these will often be present in the lower cervical spine and have no connection with the condition under discussion.

The etiology of the condition can be divided into: (1) those cases in which a lesion is present in the greater occipital, either intrinsic or extrinsic, and, (2) those cases in which no definite lesion or damage to the nerve root or ramus has occurred, and the symptoms may be thought to be largely on a psychogenic basis.

In the first group, an intrinsic lesion in the sensory portion of the nerve, similar to that which occurs in trigeminal neuralgia, producing "tic douloureux" may occur. These cases may have excruciatingly sharp attacks of pain and definite "trigger areas" may be present. Also, in the first group are those patients in which some extrinsic factor, such as trau-

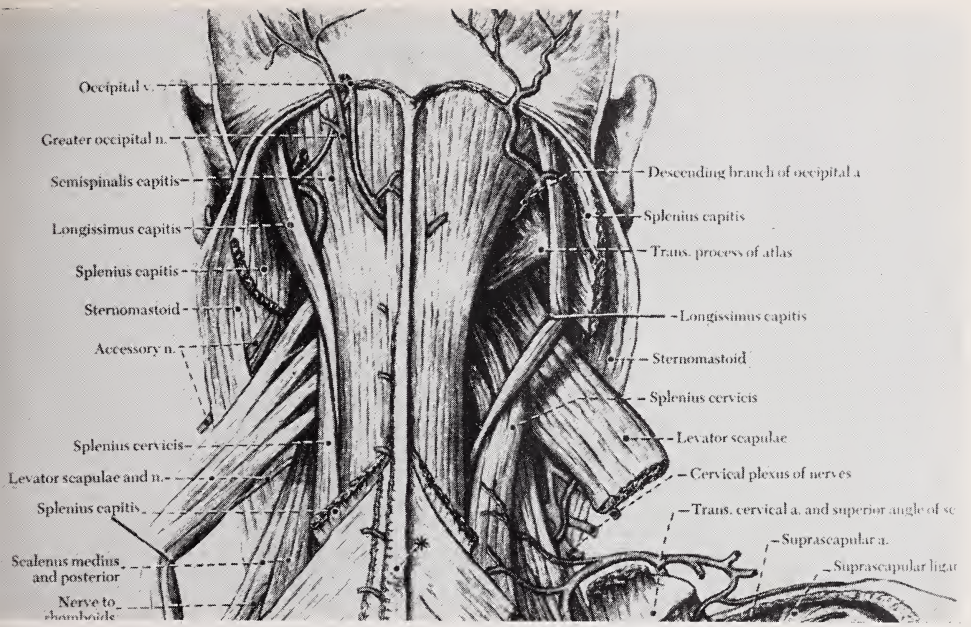


Fig. 1. View showing course of greater occipital nerve. (Reproduced from Detailed Atlas of the Head and Neck: Truex and Kellner, New York, Oxford University Press, 1948).

ma, or crushing of the nerve root between the laminal arches of cervical one and cervical two, occurs.

Hunter and Mayfield[1] described eleven cases of recurrent hemicranial pain, and divided these cases into: (a) those displaying symptoms when a history of trauma was present, and, (b) those with symptoms when no history of trauma was obtained.

It can be seen from a study of the anatomy of the region that the first and second cervical vertebrae have an unusual range of motion on each other during rotation of the spine. This range of rotation is greater than that in the other cervical spine articulations. The first and second cervical nerve roots emerge behind the lateral articular masses of these vertebrae, and are not protected posteriorly by pedicles and facets, which are present in the other cervical vertebrae.

The ganglia of these nerves, instead of being present in the intervertebral foramina, lie upon the vertebral arches of the axis and atlas. These nerves then course laterally and upward and divide into two divisions. The anterior primary ramus of the first cervical root passes over the posterior arch of the atlas, and passes around the upper articular process of that vertebra. The second cervical nerve root passes between the laminal arches of the atlas and axis. The nerve root then divides into the anterior primary ramus which courses around the inferior articular facet of the atlas, and the posterior primary ramus or greater occipital nerve which passes out beneath the laminal arch of the atlas, between it and the laminal arch of the axis, and curves posteriorly to the soft tissues of the upper neck over the arch of the atlas. It then continues to the occipital region of the head.

Within the normal range of rotation, this nerve trunk is probably not amenable to trauma. However, the unusual excursion of these vertebrae on each other, especially if forceful rotation is present, could conceivably injure the nerve by crushing it between the bony margins of the atlas and axis, or possibly stretching the nerve around the arch of the atlas.

The treatment of choice will be dictated by the underlying cause of the condition. Hunter and Mayfield[1] state that in their patients, where a history of trauma was present, interruption of the upper cervical nerves or avulsion of the greater occipital nerve afforded relief. In those patients where no history of trauma was present, surgical avulsion of the nerve root was without benefit.

Crutchfield[6] believes that short periods of traction, usually with a Sayre head halter, rarely with skeletal tongs in the skull, will often afford relief, especially if the nerve has been traumatized.

In those cases displaying "tic" symptoms, injection of the nerve trunk with procaine may abolish the symptoms. Frequently, surgical removal of the ganglia is necessary.

Naturally, a number of the cases will have no history of trauma or specific signs to establish a

diagnosis of nerve root injury. These cases are thought to be chiefly psychogenic in origin and psychotherapy is indicated. However, quite a few cases with no established etiology will respond to procaine injection of the nerve root or greater occipital nerve. This procedure is done quite easily, by having the patient lie in a prone position with the head over the end of a table. A line is then drawn from the midline of the upper cervical spine, on the suboccipital region, to the base of the mastoid process. At a point over the lateral mass of the atlas and axis, or approximately one-third of the distance along the line from the spine to the mastoid process, a skin wheal is raised with procaine. The area above, and slightly medial to this, in the muscle planes, is infiltrated with procaine.

This will frequently abolish the patient's symptoms, at times for prolonged periods of time.

REPORT OF CASE

Herein described a typical case in which no history of trauma to the nerve was present, nor no definite etiology discovered.

The patient, a thirty-seven year old housewife, complained of a dull, aching, persistent pain which radiated from the suboccipital region to the back of the head, temporal region, and forward to the eye on the right. She stated that her symptoms had been intermittently present for four years. The patient had a radical mastoidectomy many years previously for a persistent otorrhea, but no connection could be established with the patient's present history. To a lesser degree, the patient said that she did have similar symptoms on the left side in the past. The patient's symptoms were made worse by concentration and overwork.

Examination revealed a tender area to palpation over the lateral mass of the atlas and axis in the suboccipital area on the right. Forceful rotation of the head reproduced the pain, extending into the occipital and temporal regions on the right, and to a lesser degree on the left. X-rays of the cervical spine were negative except for some questionable narrowing of the fifth and sixth inter-vertebral space, and a loss of the normal lordotic curve.

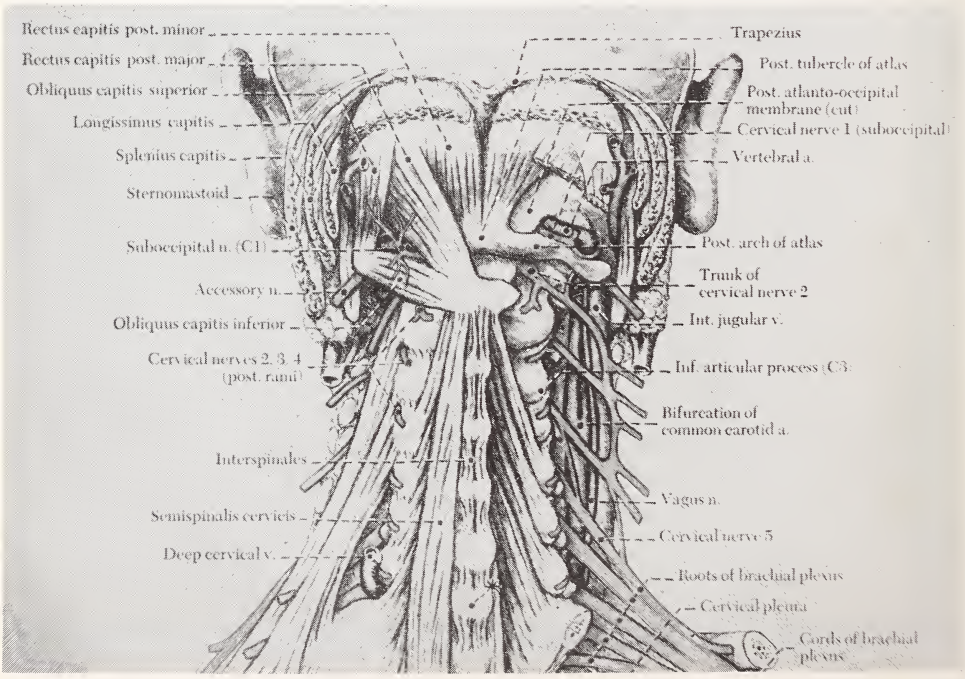
The greater occipital nerve on the right side was injected with 2 cc. of procaine, following which the patient was symptom-free for six months. At that time, the patient returned, and said that her headache had been completely relieved by the injection. During the past few days, her symptoms had returned, and a repeat injection was done with relief.

CONCLUSIONS

1. Some common causes of headache are mentioned, including various extracranial causes, such as eye-strain, infections in the nasopharynx and sinuses. Also, intracranial lesions including brain tumors, aneurysms, and lesions in the cervical spine including fractures of the lamina, and pedicles, ruptured intervertebral discs and arthritis, is noted.

2. Lesions of the greater occipital nerve are a fairly common cause of occipital neuralgia or occipital headache.

Fig. 2. Detailed anatomy of suboccipital region. (Reproduced from Detailed Atlas of the Head and Neck: Truex and Kellner, New York, Oxford University Press, 1948).



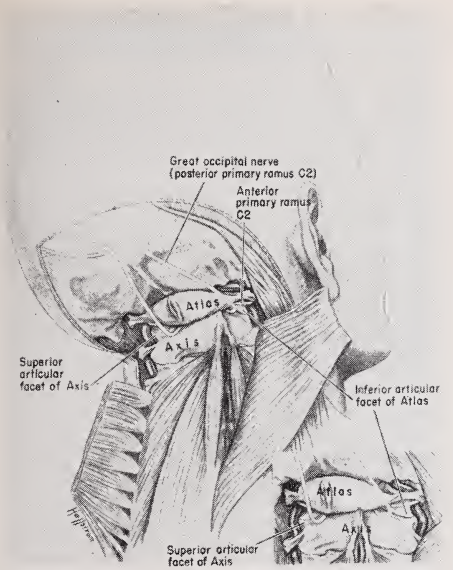


Fig. 3. Demonstration of cause of trauma to greater occipital nerve. (Permission by Hunter, S. R., and Mayfield, F. H.: Am. J. Surg. 78:745 (Nov.) 1949)

3. These cases are divided into: (1) those in which a lesion of extrinsic or intrinsic origin is present in the nerve root or ramus, and (2) those in which no lesion is present in the nerve and are sometimes ascribed to a psychogenic basis.

4. Intrinsic lesions such as the type in the sensory portion of the trigeminal nerve producing "tic douloureux", can occur in the greater occipital nerve and cause a similar condition.

5. The anatomy of the suboccipital region is described. This shows the unusual range of mobility between these vertebrae, and the mechanism of compression or possibly stretching of the greater occipital nerve, as it runs between the laminal arches of the atlas and axis (Fig. 3).

6. The symptoms will vary according to the specific lesion. If the nerve is traumatized by compression, a typical radiation of the pain which may be severe and persistent, is present.

The cases in which no specific cause can be demonstrated may be classified on a psychogenic basis. These will complain of a dull, aching pain on one or both sides in the suboccipital area and often present for a long time.

7. Examination often reveals a tender area to palpation over the lateral mass of the atlas and axis in the suboccipital region.

8. X-rays of the cervical spine may be negative except for a reversal, at times, of the normal lordotic curve.

9. Treatment depends on the underlying lesion. Surgical avulsion may benefit a traumatized or crushed nerve. Head halter traction for short periods often affects relief in the traumatized nerve, and occasionally in those in which no etiology is found.

Simple injection of procaine will often affect prolonged relief in those cases displaying no definite etiology.

10. A typical case in which no definite etiology could be found is described, and the benefit provided by injection of the greater occipital nerve with procaine.

BIBLIOGRAPHY

1. Hunter, C. R., and Mayfield, F. H.: Am. J. of Surg. 78:743-748, (Nov.) 1949.
2. Raney, A., and Raney, R. B.: Ann. West. Med. & Surg. 2:169-174, 1948.
3. Josey, A. Izard: J.A.M.A. 140:944-949 (July 16) 1949.
4. Wolff, H. G.: Arch. of Neurol. & Psychiat. 50:224, (Aug.) 1943.
5. Pollock, Lewis J.: M. Clin. North America, 25:3-13, (Jan.) 1941.
6. Crutchfield, W. Gayle: Personal communication to the author.

PRESS COMMENT: *Discounted in Advance*

A short time ago, the President announced the creation of a "commission on the health needs of the nation." It is to be financed from emergency funds which have been allocated for purposes of national defense.

Dr. Gunnar Gunderson, a former president of the Wisconsin State Medical Society and a regent of the University of Wisconsin, was appointed a member. He immediately refused the appointment, and stated, "I believe I am correct in assuming that the commission is designed, both in its majority membership and in its objectives, as an instrument of practical politics, to relieve President Truman from an embarrassing position as an unsuccessful advocate of compulsory health insurance."

This doctor is not alone in holding such views. The Chicago Daily News said editorially, "Precedent . . . supports Dr. Gunderson's conclusion that Mr. Truman's interest in health is largely confined to the convalescence of his political machine. Under his auspices, the findings of the commission are discounted in advance, on the theory that he is far too cagey to risk a report that might be critical of one of his favorite vote-getting appeals."

The moral is plain. The fight must continue with unabated vigor against the effort to bureaucratize the practice of medicine and to save this country from Britain's sorry experience.

—Brunswick News.

Some Clinical Notes on CHRONIC RELAPSING PANCREATITIS

ALBERT M. SNELL, M.D., Palo Alto, Calif.

Until a few years ago chronic relapsing pancreatitis was looked upon as an unusual and rare disease. Recent publications on the subject, however, notably those of Comfort and his associates[4], have stimulated interest in the subject, and it is now clear that the alleged rarity of the disorder was largely a matter of diagnostic error. The detection of the disease in gastrointestinal clinics is now relatively commonplace and examples of the disorder can be readily found in the wards of any general hospital. Like many another supposedly rare ailment, it is common enough if one looks for the disease and keeps its cardinal features in mind.

However there are many cases still undiagnosed. The author has recently had the opportunity of seeing two patients, each of whom had had approximately 20 hospitalizations with extensive diagnostic study before a correct diagnosis was finally made. In each case the diagnosis would have been simple if use had been made of the current laboratory methods for confirming the presence of the disease.

Cattell and Warren[2] have recently reported on a series of 29 patients. They have made the interesting observation that 21 of these individuals had been subjected to 43 different surgical procedures prior to the time of examination; in only a handful of the patients had the proper diagnosis been appreciated previously.

It is not difficult to see why the disease has so generally escaped detection. In medical literature until recently it has been considered in piece-meal fashion. Thus, there are papers on acute hemorrhagic necrosis, on pancreatic cysts, on calcification, abscess and the like with little or no attempt to develop a composite clinical picture relating all of the above facets of the disease. The situation in respect to diagnosis is further confused by the frequent association of pancreatitis with disease in other organs. Its association with gallstones is fairly well recognized but it is not so generally known that pancreatitis may involve the duodenum, the stomach, the liver, where it can produce a marked fatty metamorphosis, and even the colon. There are recent reports[1,4] of two cases of stricture of the colon produced by pancreatic necrosis.

Finally, it must be noted that many of the victims of the disease are poor witnesses in their own behalf. There is often a story of alcoholism, and in fact, the patient's account of some of the acute attacks may be shrouded in a fog of ethanol. Many of the patients have been hospitalized and examined many times usually between major attacks, with essentially negative results. They have often developed a resistant defensive attitude toward their physicians and not a few have become dependent upon narcotics. As a result they are often regarded as psychoneurotics, chronic complainers and addicts.

The nature of the disorder has been very well described by Comfort and his associates,[4] and it is difficult to improve on their definition of the disease as "The summation of repeated attacks of acute interstitial pancreatitis, or repeated sublethal attacks of so-called acute hemorrhagic pancreatitis or a combination of the two." It is apparent that edema, local hemorrhage and acute necrosis appear first, that interstitial fibrosis, necrosis and atrophy develop with the progression of the disease and that calcification, cysts or abscesses occur still later. The development of the disease and its ultimate slow destruction of all or part of the pancreas seems as a rule, to be a very gradual affair. There may be recurring exacerbations of long or short duration, separated by intervals of clinical quiescence. Early in the disease, especially in the intervals between acute attacks, it is impossible to demonstrate any evidence of pancreatic dysfunction. Later however, disturbances of internal and external secretion are easily demonstrable and the phenomenon of pancreatic calcification, upon which so many diagnoses have been based, will appear.

Etiology

Regarding the etiology of the process, relatively little is known. Because of the frequent association of biliary tract disease the earlier theories of etiology are concerned mainly with possible biliary reflux into the duct of Wirsung with a chemical pancreatic necrosis. However, a great many cases have a perfectly normal biliary tree long after the pancreas has sustained maximal damage. The author knows of one case of 18 years duration in which the gallbladder is still intact and functioning normally on cholecystography. It should also be pointed out that

Read before Atlanta Graduate Medical Assembly, Atlanta, March 12, 1952.

From Palo Alto Clinic, Palo Alto, Calif.

Comfort's[4] original series contain no cases in which primary cholecystic disease was present.

These well-known facts plus the observation that by no means all patients have a common channel involving their biliary and pancreatic ducts, have led to the consideration of sphincteric spasm as a cause for biliary reflux. Obviously such spasm must persist long enough to rupture pancreatic ducts and release lipase or trypsinogen. In view of what is known of the behavior of the sphincter in biliary dyskinesia this seems rather unlikely.

While the mechanics of the process of liberation are by no means clear, it does seem well established that trypsinogen is a major factor in the initiation of pancreatic damage. Studies[10] on experimental animals have shown that the injection of trypsin intravenously induces a series of events which include hyperglycemia, elevated serum amylase and hypocalcemia, as well as an acute necrotizing vasculitis. It has also been shown that temporary obstruction of the pancreatic duct, with subsequent stimulation of the gland by means of secretin, also produces a somewhat similar chain of events. Finally, anti-tryptic activity can be demonstrated in the serum of both patients and animals following an episode of pancreatic injury.[3]

There is some evidence to suggest that the main ducts of the pancreas need not necessarily be involved in the production of the disease. Some interesting observations made by Rich and Duff[15] in 1936 and more recently by Wainwright[18] indicate that intrapancreatic obstruction due to ductal epithelial metaplasia may be of considerable importance. Others have described similar areas of metaplasia and have noted the spotty distribution of the necrotic lesions in the pancreas itself.

Investigation of the clinical aspects of chronic relapsing pancreatitis in a search for etiologic factors has not been particularly profitable. Trauma and infectious processes rarely seem to be particularly important. There have been a few cases in which a familial incidence was noted. Recently it has been shown that in essential hyperlipemia pancreatitis may develop. Klatskin and Martin[11] have suggested that perhaps an alteration in the physical state of lipids in such cases may lead to vascular occlusion, thus precipitating attacks of pancreatitis. Alcohol has been a factor in probably two-thirds of the cases studied. The relation of the late or chronic disease to acute hemorrhagic pancreatitis has been disputed by some observers. There is no question about the similarity of the acute attacks in the two diseases, but from 40 per cent to 50 per cent of patients who have had isolated episodes of hemorrhagic pancreatitis remain well thereafter, or at least do not progress to any serious degree of destruction of the gland.

History and Findings

The most important single symptom of chronic relapsing pancreatitis is pain. While the painful episodes may be intermittent, the individual attack is an extraordinary persistent affair which may last for days, in contra-distinction to the usually relatively brief course of pain produced by gallstones. The pain is most frequently located in the epigastrium; the second commonest site is in the right upper quadrant, and the least frequent area is the left upper abdomen. Back pain, an extension of that felt anteriorly, is common. Radiation of the epigastric pain to the left and posteriorly sometimes occurs and is of diagnostic importance. The pain is severe, steady, and apparently almost unbearable. Temporary relief may be obtained by means of morphine or demerol but often heroic doses are required. The pain is usually associated with vomiting, obstipation and abdominal distension, a combination of events which has led to not a few diagnoses of intermittent or partial intestinal obstruction. As previously stated the attacks may extend over many years with relatively long intervals of good health. In the interval there may be no symptoms of consequence but a good many patients complain of persistent dyspepsia of an unclassified nature, characterized by food intolerance, flatulence and constipation. The digestive symptoms may be and often are obscured by the alcoholic habits of many of the victims of the disease and by their intermittent use of narcotics.

It should be pointed out that the shock-like state and rigid abdomen so commonly seen in acute hemorrhagic pancreatitis is not often encountered in the chronic form of the disease. In the former, intra-abdominal bleeding has been noted, with the classical Gray-Turner sign. I know of one case of relapsing pancreatitis in which hemoperitoneum occurred in two instances with subsequent discoloration of the flanks. In each instance however, the evidence for an "acute abdomen" at the time of the attack was equivocal.

Physical findings, even when the patient is suffering from an attack of pain, are remarkably few. Most patients show evidence of wasting and weight loss. Some enlargement of the liver is occasionally noted, presumably because of fatty metamorphosis. Jaundice may occur, and if it does, it presents the usual clinical and laboratory phenomena associated with intermittent biliary obstruction. Glycosuria and hyperglycemia may occur with acute attacks or may develop late in the course of the disease as permanent pancreatic damage develops. Rarely pancreatic cysts and abscesses are palpable especially in wasted individuals. Fever is not particularly uncommon. (50 per cent in Meuther and Knight's[18] series).

The classical laboratory findings upon which diagnosis may often be based are increases in the serum enzymes, amylase and lipase. Rises in the former enzyme are often transitory and as a rule do not persist beyond the first 24 hours of an acute episode. Lipase increases are much more consistent and may be present for days or even weeks. Neither enzyme may be present in increased amounts in the serum in the very early case or in the very late case when the pancreas has been largely destroyed. Too much reliance cannot be placed on amylase increases alone. It has been noted that diseases other than pancreatitis will cause elevations of this enzyme, notably, perforated peptic ulcer. There may also be amylase

increases following the use of codein and other morphine derivatives known to have a constricting effect on the sphincter of Oddi.[8] As a rule, amylase increases under these circumstances are not great, and serum amylase values of more than 1,000 units are quite unlikely in any condition other than acute pancreatic necrosis.

Marked increases in the amylase content of peritoneal fluid obtained at operation have been noted on a number of occasions. It is probably wise to do amylase determinations on any specimens of peritoneal fluid obtained at operations in the acute abdomen, since very high levels seem to be more or less diagnostic of pancreatitis.

Recently much attention has been paid to serum electrolyte values and it has been shown that hypocalcemia occurs in about 70 per cent of cases during the second to the fifth day after the onset of pain. Calcium levels of about 7 to 8 mg. are the rule under these circumstances; in a few patients in which greater falls have been noted, death has usually ensued. Hypokaliemia has been observed in about the same number of cases by Edmondson and his associates.[7] This may be partly due to parenteral glucose therapy, gastric suction and diminished potassium intake. Low serum sodium and magnesium have been noted on a few occasions. The significance of these changes in electrolytes is quite obvious. Serum calcium is probably deposited at the sites of pancreatic necrosis; the diminution in the serum potassium and sodium are most likely due to extrinsic causes.

Innerfield and his associates[10] have recently reported on the antithrombin titre of serum in acute pancreatic injury and have shown very consistent elevations lasting over several days following episodes of pancreatic necrosis. While technically difficult, the determination of antithrombin is not beyond the scope of the average laboratory and can be done on refrigerated plasma; it can also be done very rapidly, in distinction to determinations of serum lipase which require about 36 hours. They[10] note some positive antithrombin values in perforated peptic ulcer, acute alcoholic gastritis and acute biliary tract infections. I know of no data on antithrombin titre in the more chronic forms of pancreatic disease, but there would appear to be no reason why elevated values might not be obtained under certain circumstances. Because of the high specificity of the procedure and the rapidity with which the test can be done, it certainly deserves much further attention.

In the intervals between acute episodes, the serum enzymes remain within normal limits. Because of this fact, attempts to produce serum enzyme elevations have been made in the quiescent case by various artificial means such as the concurrent administration of codein and stimulation of the pancreas by secretin.[12] The results have been somewhat disappointing, chiefly because positive results can be obtained in certain apparently normal individuals. Several recent reports on this subject are of unusual interest if only because of their cautious and critical approach to the problem.

Pancreatic insufficiency in respect to external secretions is a relatively late development in this disease. Steatorrhea and azotorrhea usually occur late; the stools contain neutral fat which can easily be demonstrated by staining the stool with appropriate agents. Curiously enough, studies of external pancreatic secretion obtained by duodenal intubation, following secretin stimulation, have not been particularly rewarding in diagnosis.[5] In the later stages of the disease when the gland is extensively damaged, some disorders of external secretion can be demonstrated. Amylase appears to disappear first in acute cases, lipase and trypsin diminish later, while water and bicarbonate secretions may be characteristically disturbed in some cases of long standing. Because of the technical difficulties of the methods usually employed this type of study is of little value except as a research tool.

One finding which has led to a belated diagnosis in many cases is that of pancreatic calcification. Twenty years ago this was thought to be something of a rarity but it is now described frequently and its characteristics are well known. The calculi are usually discrete, multiple and very radiopaque. They are arranged in a diagonal manner running from right to left across the first to the second lumbar vertebra. They vary somewhat in size, but their distribution and density, plus the fact that they can be seen as an agglomeration of shadows in a lateral view makes them relatively easy to identify. This bit of radiologic evidence should be sought for in every patient who has had recurrent bouts of severe upper abdominal pain; to do so would clarify diagnosis in many obscure abdominal disorders.

Recently radiologists have become interested in the effects of chronic pancreatic disease on the stomach and duodenum. Among the various radiologic findings which have been described are widening of the duodenal loop, indentation of the duodenum or indeed actual constriction, indentation of the posterior wall of the stomach, and anterior dislocation of that organ. Radiologic studies may show a decreased gastrointestinal motility often of a sufficient degree to suggest possible ileus. These studies are increasingly useful in skilled hands and may well add a great deal to one's diagnostic armamentarium.

Among the associated phenomena which may confuse the diagnosis but which should probably be sought for in all patients with pancreatic injury are evidences of hepatitis with or without fatty change. In a few patients that have come to the author's attention, the hepatic lesions have, in fact, somewhat overshadowed the primary pancreatic disease. Evidences of renal injury with albuminuria and an elevated non-protein nitrogen of the blood are not particularly uncommon, particularly at the time of an acute episode. The co-existence of diabetes is well known. It may develop as early as two years after the first attack of pain or as late as twenty-five years thereafter. It is rarely of great severity and shows little tendency to be associated with visceral or arterial disease such as may occur in the spontaneous diabetic. In some cases a latent diabetic tendency can be demonstrated by a glucose tolerance test.

Gastrointestinal bleeding which occasionally complicates chronic pancreatic disease may produce a rather marked secondary anemia. The source of the bleeding is not entirely clear; even surgical or necropsy studies have at times failed to reveal a specific bleeding point.

Associated gastritis and duodenitis have been observed in many patients. In a considerable number of individuals there is a previous history of profuse gastrointestinal bleeding, the site of origin of which has not often been accurately determined. Again one may turn to the experimental animal for an explanation; it has been noted that following injections of trypsin they frequently have necrotizing vascular lesions in various parts of the body which of themselves, if properly located, might lead to melena and hemetemesis.

As the above paragraphs indicate there may be wide variations in the clinical picture of pancreatitis and various combinations of symptoms may be presented by a patient at one time, with an entirely different picture at another and later date. The various types of syndrome encountered have been classified by Comfort and his associates as follows:

GROUP I—Pain with temporary changes in islet and acinar function; no diabetes, calcification or steatorrhea.

GROUP II—Pain, diabetes and steatorrhea without calcification.

GROUP III — Pain without observed transitory changes in acinar or insular function; no diabetes or steatorrhea, with marked calcification.

GROUP IV—Pain followed by diabetes and calcification but without steatorrhea.

GROUP V—Pain with steatorrhea and calcification but without diabetes.

GROUP VI—Pain with diabetes, calcification and steatorrhea.

GROUP VII—Pain absent (or at least not recalled by patient) but diabetes, steatorrhea and calcification present.

Among the additional clinical phenamena which confuse the diagnostic picture further may be mentioned; (1) psychotic behavior, often associated with morphinism or alcoholism; (2) acute circulatory disturbances reminiscent of those seen in experimental animals after the intravenous injection of trypsin; (3) chronic pancreatic suppuration with associated biliary cirrhosis; (4) extensive fatty change in the liver with fatal hepatic insufficiency; (5) diffuse xanthomatous skin lesions. One would suspect that the latter lesions were most often associated with essential hyperlipemia, which, as an earlier paragraph indicates, may be associated with progressive pancreatic disease.

Course and Prognosis

The disease may burn out and eventually become relatively painless leaving a patient with variable degrees of pancreatic insufficiency, diabetes and steatorrhea. The process may be exceedingly slow and it is not uncommon to find patients who have had symptoms for years. Death may occur at any time during the course of the disease from intercurrent infection, pancreatic necrosis or abscess, or gastrointestinal hemorrhage. In a considerable number of patients surgical procedures, to be mentioned in a later paragraph, have been successfully employed and the individuals have enjoyed a reasonably comfortable existence. On the whole however, the outlook for continued health is poor, the disease often producing variable degrees of invalidism.

Treatment

Treatment is still an unsolved problem. The etiology of the disease is obscure and more conservative procedures have failed to produce a high percentage of successful results. There are however, some mildly promising leads. Workers at Duke University[17] have shown that vagotomy exerts an inhibiting effect on pancreatic secretion, and that such drugs as banthine may also reduce secretion markedly. Annis and Hollenbeck[1] have confirmed the latter observation and have shown that the volume, alkaline content and tryptic activity of pancreatic juice are all greatly reduced in experimental animals by the administration of banthine in full dosage. The drug does not however, inhibit the response to secretin. Acting on these suggestions banthine in doses of 100 mg. intravenously every six hours has been given to patients with acute pancreatitis with dramatic pain relief, a rapid fall in blood amylase, and marked general improvement.

Ripstein[16] has claimed a great reduction in the mortality of experimental animals on whom pancreatic duct ligation plus intraductal injection of bile and tryptsin have been performed, if a preliminary vagotomy is done. The clinical value of this approach is as yet unknown. A few patients with pancreatitis have had a vagal neurectomy; I know of no dramatic improvement in such instances, and one patient recently seen was made worse.

A great many surgical procedures have been employed in dealing with chronic relapsing pancreatitis. Cholecystectomy, choledochostomy, and section and transplantation of the common bile duct have all been practiced with results which are relatively unsatisfactory. Most recently sphincterotomy, which may be either transduodenal or intraductal, has been advised and some encouraging reports have reached the literature.[6] Other surgical authorities however, have not been particularly enthusiastic about this approach. The author must admit to some skepticism of its value in view of the tendency of the symptoms of pancreatitis to recur after long continued T-tube drainage of the common duct.

Gastroenterostomy has often been necessary in cases in which the second and third portions of the duodenum have been compromised by a pancreatic mass. Gastric resection has also been advocated on the theory that it will diminish the pancreatic response by limiting secretin formation. A good many patients however, have continued to have trouble in spite of this operation and as Cattell and Warren[2] say, it is hardly advisable unless there are some local gastric or duodenal lesions which are in themselves

sufficient to justify gastric resection.

Among the direct procedures which have been advised are drainage of cystic accumulations and abscesses; pancreatolithotomy, which is rarely adequate because of the extensive calcification of the body of the gland; and anastamoses of the duct of Wirsung to the intestine. The latter procedure is technically difficult but there may be cases in which it is justifiable. Ligation of the pancreatic duct, a procedure well tolerated in the dog, would conceivably carry less risk and might produce a satisfactory result.

Recently Cattell and Warren[2] have advised that partial or total pancreatectomy should be done more often in patients with advanced and intractable chronic destructive pancreatitis. Both pancreatoduodenectomy and distal pancreatectomy have been performed. The results reported are definitely encouraging, considering the stage of the disease and the pathologic state of the gland.

Splanchnic section still finds favor in dealing with the problem of pancreatic pain; as a means of obtaining temporary relief it may be recommended. It should be reserved for patients in whom the diagnosis of chronic pancreatitis has been confirmed at surgery and in whom other methods of pain relief have failed. It should usually be bilateral and extensive if it is to be successful and for this reason it increases the hazard, now generally recognized, of masking the symptoms of coexisting peptic ulcer. It should not be done lightly, nor without preliminary diagnostic procaine block. Partial or total pancreatectomy is a more logical, albeit a more dangerous procedure, in the late and intractable case.

Conclusions

Chronic relapsing pancreatitis is a fairly common disease which should be easily diagnosed in the majority of cases. While sometimes bizarre, the symptomatology is fairly characteristic if one is familiar with the pathology, course and progression of the disease. Studies on serum enzymes and radiologic observations are most helpful in establishing a diagnosis. Treatment is most frequently surgical; there is a definite trend toward such radical procedures as pancreatectomy. Sphincterotomy and T-tube drainage still have some advocates.

BIBLIOGRAPHY

1. Annis, D., and Hollenbeck, George: Some effects of Banthine on Pancreatic function, Gastroenterology 17:560 (April) 1951.

2. Cattell, R. B., and Warren, K. W.: The Choice of Therapeutic Measures in the Management of Chronic Relapsing Pancreatitis, Gastroenterology, 20:1, (Jan.) 1952.

3. Coffey, R. D.: Unpublished Data.

4. Comfort, M. W., Gambell, Earl, and Baggenstos, A. H.: Chronic Relapsing Pancreatitis, Gastroenterology 6:239, (April) 1946.

5. Dreiling, D. A. and Hollander, F.: Studies in Pancreatic Function I—Preliminary series of Clinical Studies with Secretion Test, Gastroenterology, 11:74, (Nov.) 1948.

6. Doubillet, H., and Mulholland, J. H.: The Surgical Treatment of Recurrent Acute Pancreatitis by Endocholedochal Sphincterotomy, Surg., Gynec. & Obst., 86:295, (March) 1948.

7. Edmondson, Hugh A.; Boone, Clarence; Homan, R. E., and Wertman, Maxine: Calcium, Potassium, Magnesium and Amylase Disturbances in Acute Pancreatitis. American Journal of Medicine, 12:34, (Jan.) 1952.

8. Gross, J. B.; Comfort, M. W.; Mathieson, D. R., and Power, M. H.: Elevated Values for Serum Amylase and Lipase Following the Administration of Opiates; a preliminary report. Proc. Staff Meet., Mayo Clinic, 26:81, (Feb. 28) 1951.

9. Heffernon, E. W., and Gunter, A. R.: Evaluation of the Secretion Test in Pancreatic Disease. Gastroenterology, 19: 526 (Nov.) 1951.

10. Innerfield, J.; Angrist A., and Benjamin, J. W.: Antithrombin Titer in Acute Pancreatitis. Am. J. Med. 12:24, (Jan.) 1952.

11. Klatskin, G., and Martin G.: Relationship Between Relapsing Pancreatitis and Essential Hyperlipemia. Am. J. Med. 12:3, (Jan.) 1952.

12. Lopusniak, M. S., and Bockus, H. L.: Study of Pancreatic Serum Enzymes Following Secretin Injections in Pancreatic Affections. Gastroenterology, 16:294, (Oct.) 1950.

13. Meuther, R. O. and Knight, Wm. A. Jr.: I Clinical and Laboratory Aspects. Chronic relapsing pancreatitis, Gastroenterology, 2:24, (Jan.) 1949.

14. Remington, J. H., Mayo, C. W., and Dockerty, Malcolm: Stenosis of the Colon Secondary to Chronic Pancreatitis, Proc. Staff Meet. Mayo Clin., 22-260-264, (June 25) 1947.

15. Rich, A. R., and Duff G. L.: Experimental and pathological Studies on the Pathogenesis of Acute Hemorrhagic Pancreatitis. Bull. Johns Hopkins Hosp. 58:212, 1936.

16. Ripstein: Quoted by Shingleton, et al.

17. Shingleton, W. W., and Anlyan, W. G.: Methantheline (Banthine) Bromide in Acute Pancreatitis. J.A.M.A. 147: 1655, (Dec. 22) 1951.

18. Wainwright, Charles: Intrapancreatic Obstruction. New England J. Med., 244:161, (Feb. 1) 1951.

PRESS COMMENT: *Meigs Responds to a Need*

The progressive little city of Meigs, only a short ride from Moultrie, has achieved another outstanding objective in community improvement. A new and modern medical clinic has been formally opened, thus filling a major need for the people of the area.

One of the most important and successful projects carried out in Meigs in recent years, the medical clinic is a product of civic ingenuity and community cooperation. The brick structure and accompanying equipment have been financed through the creation of a local corporation and sale of stock. More than 100 citizens of the community participated in the stock subscription.

Stemming from an original Kiwanis club idea in Meigs, the project was expanded into an enterprise of community-wide significance.

This modern new medical center in Meigs stands as a monument to community interest and determination. It should fill an urgent need in that particular area of southwest Georgia.

—Moultrie Oserver.

Special Articles

Dedication of

HUGHES SPALDING PAVILION

of Grady Memorial Hospital

The attractive and modern Hughes Spalding Pavilion of Grady Memorial Hospital will be dedicated Sunday, June 22, at 3 P. M.

The primary purpose of the new hospital is to serve Negroes who are not eligible for medical care in charity hospitals.

The hospital's visiting medical staff will be composed of both white and Negro physicians and it is hoped that, through the cooperation of Emory University School of Medicine and Grady Memorial Hospital, an accredited resident and intern training program may be established.

Constructed of cream brick with green marble trim, the five story hospital has a capacity of 116 beds and 33 bassinets. It is as fire proof as human skill can make it. It was completed at a cost of approximately $2,000,000 and was financed through Federal and State grants and from funds of the Fulton-DeKalb Hospital Authority.

Throughout the hospital, the corridor walls are marble, the floors of terrazzo and the ceilings have sound treatment of spun glass. The walls in the emergency clinic, operating room, delivery room and scrub-up rooms are of an attractive blue-green glass and the floors are laid with Flexo-Tile which insulates against static electricity.

On the main floor are located the lobby, information desk, lounge, library, record room, business office, drug room, emergency clinic, and dining rooms. Here, also, is the main kitchen, finished in yellow ceramic tile walls, spun glass ceiling and red quarry tile floor, and equipped with every conceivable up-to-the-minute culinary device. Just off the kitchen is the formula room and special diet kitchen.

The basement houses the laundry, shops, store rooms, oxygen room, canteen, locker rooms, and morgue.

On the upper floors are located the patients' rooms which are painted in soft pastel shades. There are 4-bed wards, semi-private and private rooms, each with built-in oxygen and suction boxes and recessed ceiling fixtures with three-way lighting.

A special invitation is extended to doctors throughout the State to attend the dedication of the Pavilion on June 22. Hosiptal personnel and physicians are invited to inspect the hospital during the morning hours and the public will see it after the dedication.

The dedicatory program is as follows: Invocation, W. Morgan Blake; presentation of the hospital, Governor Herman Talmadge. Responses: Dr. J. B. Harris, President of the Atlanta Medical Association; Dr. Jack C. Norris, President, Fulton County Medical Society; Dr. W. Patrick Smith, President, DeKalb County Medical Society; Dr. David Henry Poer, Secretary, Medical Association of Georgia; Dr. R. Hugh Wood, Dean, Emory University School of Medicine; Mayor William B. Hartsfield, City of Atlanta; Scott Candler, Commissioner of Roads and Revenues, DeKalb County; I. Gloer Hailey, Chairman, Commissioners of Roads and Revenues, Fulton County; Fred L. Cannon, Chairman, Advisory Committee.

Mr. Hughes Spalding will introduce the speaker, Dr. Benjamin E. Mays. Rev. William Holmes Borders will pronounce the benediction and Graham Jackson will furnish the music.

STATEMENT OF PROFESSIONAL POLICIES AND TEACHING PLANS SPALDING PAVILION

Professional Policies

1. The new hospital is a private wing of Grady Memorial Hospital for the exclusive use of Negro patients; it is a teaching hospital.

2. In accordance with the request of the Negro doctors of Atlanta, Emory University and The Fulton-DeKalb Hospital Authority have agreed that the Chiefs of Service at Grady

Memorial Hospital will act as Chiefs in the new Negro hospital. In their absence, they will appoint a competent representative to act for them. Their duties shall entail the maintenance of professional standards that will insure a high grade of patient care, and the maintenance of a teaching program for the local Negro doctors and any intern or resident training program that may be subsequently initiated.

3. Staff eligibility is on the basis of good moral character and membership in The Atlanta Medical Association, Fulton County Medical Society, or DeKalb County Medical Society. All doctors meeting the above requirements are eligible. Appointment is by the Hospital Authority. The professional activities of members of the staff shall, at all times, be subject to the supervision, direction, and control of the Chiefs of Service of Grady Memorial Hospital.

4. Since this hospital is not yet open and no accurate estimate of the clinical material that it will contain can be made at this time, independent internships will not be considered for the year 1952-53. In lieu thereof, for the year 1952-53, an adequate number of graduate Negro physicians will be recent graduates of a grade-A medical school who have had one year of acceptable internship. They shall be investigated and shall be acceptable from a moral, ethical, and professional standpoint. They will work directly under the Chiefs of Service, and their duties shall be such as are assigned to them by the Chiefs of Service. The appointment of these physicians shall be made in accordance with the existing policies of the Grady Memorial Hospital.

5. Every effort will be made to keep the hospital available for the patients of Negro doctors and, in case of a bed shortage, patients of Negro doctors will be given preference.

6. It is the purpose of both the Hospital Authority and the University to give Negro doctors the greatest measure of responsibility possible. It is the earnest desire of both the Hospital Authority and the University that Chiefs of Service shall be Negro doctors and, when the chiefs' places are filled by Negroes, neither the University nor the Hospital Authority will withdraw its support but the present Chiefs of Staff will remain as consultants and continue their efforts to further the educational program.

Teaching Plans

1. Each clinical department will make rounds in the private wing at least once each week under a schedule approved by the Chiefs. These rounds shall be open and may be attended by all staff members.

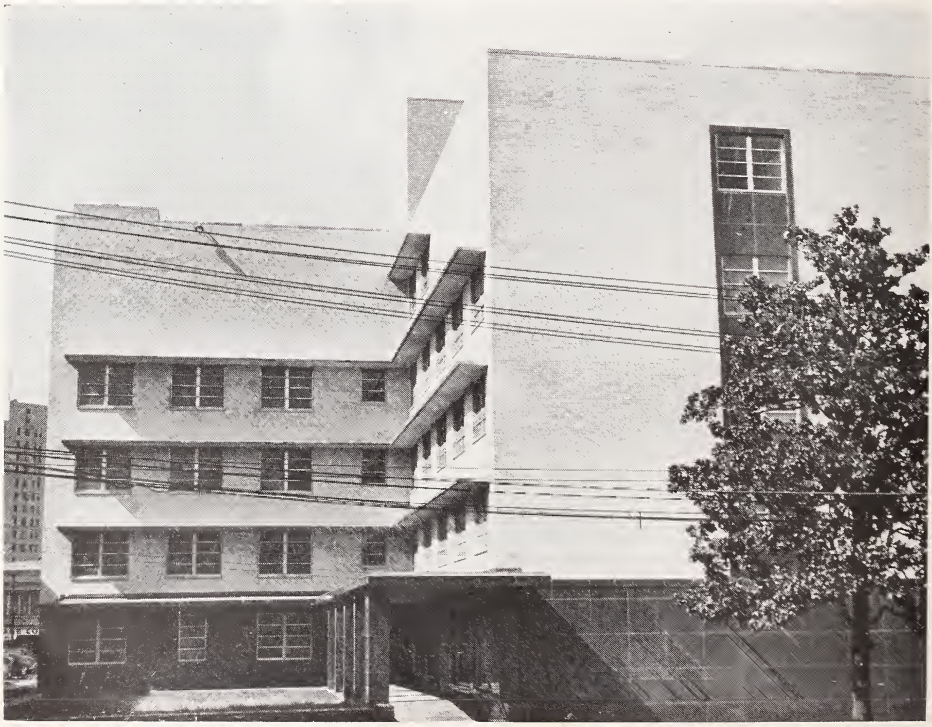
2. At the beginning, a joint or inter-departmental conference shall be held once each week in the hospital. The Negro doctors are urged to participate actively in these conferences and to suggest to the Chiefs the subjects to be dealt with, using their own patients whenever possible.

3. The out-patient clinics of the present charity Negro hospital may be attended by all staff members of the private wing. Arrangements may be made by contacting the respective Chief of the Service involved. A definite educational program under the direction of the Chief will be carried out.

4. Library facilities are available in the building; complete indexes will be made available and the librarian will secure all publications that are necessary.

Unanimously adopted at a meeting of the Joint Committee and the Executive Committee of the Professional Staff on January 16, 1952.

HUGHES SPALDING PAVILION OF GRADY MEMORIAL HOSPITAL, ATLANTA



ENOCH CALLAWAY, M.D., LaGrange

CANCER *of the* TONGUE

While cancer of the tongue may be cured by x-ray or radium or at times even by electrocoagulation of the lesion or by local removal, the treatment of choice in this disease appears to be radical surgery. The entire half of the tongue involved can be completely removed and all of the lines of lymphatic spread in the floor of the mouth and in the neck can be included in the operative procedure.

Sufficient x-ray or radium therapy to be effective produces a very intensive and uncomfortable reaction in the mouth and very frequently leaves the patient with a dry, sore, irritable mucous membrane both on the tongue and on the adjacent mouth mucosa. If there are metastatic lesions in the neck, x-ray therapy is very rarely effective in eliminating these lesions. With the proper surgical technique, the patient can be left in a very comfortable condition and although speech is slightly affected, this does not constitute a serious handicap or disability to the patient. Combination therapy should never be primarily considered. If it is to be treated by radiation, the treatments should be aimed at a complete cure of the disease, both locally and along its lines of lymphatic spread. If surgery is the method selected, complete and total removal of one-half of the tongue and dissection of the neck should be carried out. Neither method done inadequately can be compensated for by inadequate use of the other method.

These patients should be well prepared in advance for their surgery and should always have inter-tracheal anesthesia. We prefer to do the inter-oral surgery first, feeling that, if the patient's condition does not justify completing the operation, there is less danger of spreading the cancer into unprotected tissue than there would be if the lymphatics were dissected first and the mouth operated on at a later date.

Surgical Technique

The tongue is split down the mid-line and the three muscles of the tongue divided at their attachments. The mucous membrane is divided along the edge of the mandible and the tongue and all of the contents of the floor of the mouth removed. By slightly splitting the tip of the half of the tongue that is left and doubling this back, it may be attached to the site of division of the hyoglossal muscle. One edge is then closely sutured to the edge of the tongue and the other edge is sutured to the tab of mucous membrane along the border of the mandible. This very effectively covers all of the raw surface in the floor of the mouth. A complete radical dissection of the involved side of the neck, including the submental region, is then carried out. These patients are encouraged to swallow semi-solid food and to talk as soon as they react from the anesthetic. With good inter-tracheal anesthesia and the use of antibiotics, the mortality rate from this operation has been reduced to a very insignificant percentage.

Taking into consideration the increased cure-rate and also the comfort of the patient, both during the period of treatment and after treatment is completed, it would appear that radical surgery was very decidedly the method of choice in treating cancers of the tongue.

ANATOMY BEFORE VESALIUS

J. CALVIN WEAVER, M.D., Atlanta

After milleniums of a gradual upward progress which can be traced to the records of the stone age, civilization springs forth, highly developed in the Nile Valley. Neolithic man raised himself above the kindred races by the accidental discovery of copper in Egypt from which instruments were forged that raised civilization out of the slough of the stone age. Though some writers claim for anatomy the highest antiquity, the oldest anatomical treatise extant is an Egyptian papyrus probably written sixteen centuries before our era.

It shows that the heart, vessels, liver, spleen, kidneys, ureters and bladder were recognized and that

Read at the Presentation of Vesalius De Humani Corporis Fabrica, 1543 to The Abner Wellborn Calhoun Medical Library, Emory University, May 27, 1930.

the blood vessels were known to come from the heart. Other vessels are described, some carrying air, some mucus; while two to the right ear are said to carry the breath of life, and two to the left ear the breath of death.

Of the genuine works of Hippocrates, generally recognized as the father of medicine, none were expressly devoted to anatomy. He had some knowledge of osteology, but of the structures of the human body in general his ideas were superficial and erroneous. He knew the outlines of the cranium and the relative situation of the bones, but of the muscles and internal organs, his ideas were confused and erroneous. He made no distinction between artery and vein, and the term "arteria", or air holder is restricted to the wind pipe. The word nerve was used to signify a sinew or tendon. The sum of knowledge possessed by Hippocrates and his immediate descendants, represents the brain as a gland from which exudes a viscid fluid; the heart as muscular and of pyramidal shape having two ventricles separated by a partition, the fountain of life, and two auricles, receptables of air. The lungs consisted of five ash colored lobes cellular and spongy; naturally dry, but refreshed by air.

Polybus, son-in-law of the physician of Cos, a recluse who severed himself from the world and its enjoyments for the study of anatomy and physiology, also showed rude and inaccurate information like his preceptor. He represents the large vessels of the body as four pairs; the first proceeding from the head by the back of the neck and spinal cord to the hips, lower extremities and outer ankle; the second consisting of the jugular, proceeding to the loins, thighs, hams and inner ankle; the third proceeding from the temples by the neck to the scapula and lungs and thence by mutual intercrossing to the spleen and left kidney and the liver and right kidney; and the fourth from the fore part of the neck to the upper extremities, fore part of the trunk and organs of generation.

Thus we see that until the time of Aristotle (384 B. C.) there was no accurate knowledge of anatomy; all that was known being derived from dissection of lower animals, which was done in a desultory and irregular manner. Aristotle was the father of comparative anatomy, and before the age of thirty-nine he composed several works, which, however, are now lost. It was he who corrected the idea of Polybus and others regarding blood vessels which he represented as being two in number and placed before the spinal column, the larger on the right, smaller on the left.

He was the first to call attention to the term aorta. Both he represents as arising from the heart instead of the brain. He represents the lungs as liberally supplied with blood, and the brain as an organ almost destitute of same. He represents the renal branches of the aorta as going to the substance of the kidney and not the pelvis, and mistakes the ureters for branches of the aorta.

He had most confused ideas of nerves; making them arise from the heart. He represents the aorta to be a nervous, or tendinous vein. Connecting all articulated bones by nerves, he makes them the same as ligaments. He distinguishes the wind-pipe from the oesophagus, he knew the use of the epiglottis, had some distinct notion of the larynx, mentions correctly the function of the wind-pipe, and had a tolerable understanding of the lung. He knew a great deal about the heart and just missed describing the circulation of the blood.

He knew many other details which time will not permit mentioning. Next to Aristotle is Praxagoras of Cos, who was remarkable for having distinguished the arteries from the veins. Until Alexandria became the respository of all the learning of the civilized world, anatomical inquiry had been confined to the examination of the lower animals. While wars and internal animosities were ravaging the balance of the world, the Egyptian Greeks kept alive the sacred fires of science. Through their influence and broad vision Herophilus and Erasistratus bear the distinction of being the first anatomists who dissected and described the parts of the human body. They were the main support of the Alexandrian School. As their works were not preserved, there is little known of their respective merits.

It appears that Erasistratus knew the valves of the heart, naming them tricuspid and sigmoid. He studied the shape and structure of the brain, its cavities and membrances. He had a distinct idea of the nature of nerves, which he made issue from the brain, and discovered lymphatics in the mesentery. He probably distinguished nerves of sensation and motion. Of Herophilus, he gave particular attention to those parts least understood. He recognized the nature of the pulmonary artery, knew the vessels of the mesentery, and first applied the name of twelve inch or duodenum to that part of the alimentary canal next to the stomach. He gave a tolerable description of the liver. He first named the choroid plexus of the ventricles of the brain, and knew the straight venous sinus which still bears his name.

The above two names of the Alexandrian School overshadowed for a long time other investigators, until the appearance of Celsus, whose work has been designated "The most valuable depository of the anatomical knowledge of the times." It is in osteology that his information was most conspicuous. He enumerates the sutures of the cranium and describes the superior and inferior maxillary bones and the teeth; and in fact most of the skeleton. He gives a good idea of the articular connections and mentions that cartilage is always present. He knew the ethmoid plate and the semicircular canals.

Though after Celsus, there appears the name of Marinus who gave an account of the muscles, and Rufus, a Greek physician, who studied Comparative Anatomy, directing attention to the tortuous course of the uterine vessels, and recognizing at this early period the Fallopian tubes, none of the authors of antiquiry held so just a claim to the title Anatomist as Claudius Galenus, who was born about the one-hundred and thirtieth year of the Christian era. At

the age of nineteen he began the study of Anatomy. Finishing this course he returned to his home city of Pergamum. He was instructed to treat the wounds of gladiators, which he did with much success. The osteology of *Galen* is undoubtedly the most perfect of the departments of the anatomy of the ancients. His description of the cranial bones almost parallels those of today. He gives the first clear account of the number and situation of the vertebrae, which he divides into cervical, dorsal and lumbar, and distinguishes from the sacrum and coccyx.

Though he appears to less advantage in myology, he nevertheless carries this part of anatomy to greater perfection than any of his predecessors. He describes the frontal muscle and the six muscles of the eye. In fact he named so many muscles and swerved so little from actual facts that most of the names by which he distinguishes the principal muscles have been retained by the best modern anatomists. His knowledge of blood vessels was the most imperfect of his works, though he did prove in opposition to Praxagoras and others, that the arteries contained blood instead of air. He knew considerable about the brain, the thoracic organs, and was generally accurate in his description of the abdominal organs. His habit of faithful observations seems to have been so powerful that in the description of material objects his genius invariably rises above the circumstances of his age. By diligence in dissection and accuracy in description, he gave the science a degree of importance and stability which it has retained through a lapse of many centuries.

His death at Pergamum in the seventieth year of his age, and the two-hundredth of the Christian era, may be regarded as the downfall of anatomy in ancient times. Interest in anatomy soon sank into a state of total inactivity and was utterly neglected during the long and uninteresting period commonly known as the dark ages. Though anatomical learning neglected by the European nations is believed to have received a temporary cultivation from the Asiatics, very little was probably accomplished as The Koran denounced as unclean one who touches a corpse, while the rules of Islam forbids dissection.

The era of Saracen learning extends to the thirteenth century, after which anatomical interest assumed new life. In the School of Bologna, anatomy was cultivated as an appendage of surgery rather than as a branch of science. Several of the outstanding men borrowed chiefly from Galen. Conditions marked time at Bologna until the development of Mondino, in the fourteenth century. A teacher of originality, his zealous cultivation of the science caused it to rise from the ashes in which it had been buried. In 1315 he dissected and demonstrated the parts of the human body in two female subjects.

His anatomy of the heart is wonderfully accurate. He described important parts of the brain, particularly the ventricles, dura mater, and choroid plexus. He mentions most of the cranial nerves, though not in the order of the moderns. Gabriel de Zerbis of Verona at the conclusion of the fifteenth century, showed one superiority over Mondino in knowing the olfactory nerves. More distinguished than any of this age in cerebral anatomy was Achillini of Bologna, a pupil of Mondino, who appeared at the close of the fifteenth century. He is known as the first who described the two tympanal bones, termed malleus and incus. In 1503 he showed that the tarsus consists of 7 bones. He mentions the opening of the ducts later described by Thos. Wharton (1610-1673). He was more accurate in his description of the organs of the right lower abdominal quadrant than any of his predecessors.

Not long after Achillini there flourished at Bologna in the beginning of the sixteenth century, Baranja, a most eminent and zealous anatomist. He dissected over one hundred bodies. In his compendium he rectified many of the mistakes of Mondino, giving minute and accurate descriptions. He is the first to mention the several textures of which the human body is composed, mentioning the characters and properties of fat, or membrane in general, of flesh, of nerve, of ligament and muscles in general. His wood cuts of muscles, though crude, showed that anatominal drawings in that early age were beginning to be understood.

He was first to mention the vermiform appendix. His was the first description of the thymus. He improved on the knowledge of the brain, having priority of the corpus striatum. He mentions the pituitary gland, the passage of the fourth ventricle, the pineal gland and the fourth ventricle itself. The distinction that Italy long retained of giving birth to the eminent anatomists of Europe, the glory acquired in the names of Mondino, Achillini and others was destined to become more conspicuous by the labors of Fallopius and Eustachius.

The sixteenth century had commenced before France began to acquire anatomical distinction in the names of Jacques Dubois, Jean Fernel and Charles Atien. Jacques Dubois (1478-1555) under the Romanized name of Jacobus Sulvius, has been fortunate in acquiring a reputation to which his researches do not entitle him. Though he was without talent for original research, his name will go down in history as the teacher of Vesalius,—the author of the Fabrica, which was described by Osler as "The greatest book ever printed from which modern Medicine dates." With all due respect to the physician-anatomists, the impulse to study human anatomy by frequent dissection and to make accurate drawings of the structure was to come from an unexpected source, the great Florentine painters.

The painters first assisted at the dissections conducted by their doctor friends and then began to dissect for themselves. The first artist to take up the scientific study of anatomy was apparently Donatello. From Donatello to Leonardo, who has been referred to as the first of modern anatomists, there is an unbroken line of truly great artists, whose work was based entirely upon dissecting and natural observa-

tion. Leonardo, himself, to forward his project of writing an anatomical treatise, with Marc Antonio, did no less than fifty dissections and made over seven-hundred and fifty separate drawings.

As Streeter says: "The influence of Leonardo upon practical anatomy is decisive; he steps into a place of intolerant central glory." Fifty years later, into the breach he made,—Vesalius entered!

EDGAR M. DUNSTAN, M.D., Atlanta

District and County CIVIL DEFENSE HEALTH SERVICES *Conferences*

The Georgia Civil Defense Health Services Plan was published in outline in the January, 1952, issue of the Journal of the Medical Association of Georgia. It represents the culmination of three years of intensive planning and completes the organization phase of the work. The period of intensive training now begins and this will be built around the Civil Defense Health Service Schools which will begin in June of this year.

It is vitally important that the community groups concerned throughout the state be informed about this Plan as soon as possible. The Medical Association of Georgia and its Woman's Auxiliary can play a key role in this. The point to get across is that the state now has a recommended statewide plan that can be put into effect if approved by the local Civil Defense Director and his Health Service Deputy. The State Parent-Teacher Association has accepted the responsibility to organize the non-professional personnel needed in the Self-help and Neighbor-help Phase and the Medical Association of Georgia has accepted the responsibility to furnish the core of the professional and technical assistance required and will do this through the different units of the Civil Defense Volunteer Medical Services Corps.

Procedure for the Conferences

There is a member of the Medical Civilian Preparedness Committee for each District Medical Association. This committeeman and the Manager of the District Woman's Auxiliary will be responsible for these meetings in their respective districts. If the Manager of a district does not live in the same city as the respective committeeman, it is suggested that she appoint a Civil Defense Co-chairman who lives in the same city; this will encourage the close liaison which will be necessary. They should become thoroughly acquainted with the Plan, and arrange as soon as possible for a Civil Defense Conference in their district with full attendance of both groups and pass the information on to them in the most effective way possible. If a speaker, exhibit material, or any other printed information is desired from State Headquarters, please notify any of the undersigned and you will hear from us promptly.

It is suggested that the following other key people be invited to these meetings: The local civil defense directors concerned and their health service staffs; the Regional Public Health Director; representatives of the hospitals in the area; the leading white and colored Parent-Teacher Association representatives; the Red Cross representatives; representatives of the American Legion and its Auxiliary; and, representatives of the Welfare Department and the Ministerial groups in the area. The objetcive is to reproduce at the district and local levels the meeting that has already been done at the state level.

The experience gained at these district meetings should then make it possible for the teams mentioned to reproduce these Conferences themselves at the county level. Because of the obvious urgency, the aim should be to complete these series of meetings within the next six months so that the program can be put into effect where adopted with the least delay possible.

Let us know of any way that we can help.

*Mrs. Edgar Dunstan, 604 Ponce de Leon Place, Decatur, Georgia.

*Mrs. Shelley Davis, 1259 Peachtree Battle Avenue, NW, Atlanta, Georgia.

*Civil Defense Co-chairmen, Woman's Auxiliary, Medical Association of Georgia.

Lester M. Petrie, M.D., Deputy Director, State Civil Defense Health Services Div., 247 State Office Building, Atlanta 3, Georgia.

Edgar M. Dunstan, M.D., Chairman, Medical Civilian Preparedness Committee, Medical Association of Georgia, 604 Ponce de Leon Place, Decatur, Georgia.

ORGANIZATION

for 1952-1953

Medical Association of Georgia

OFFICERS FOR 1952-1953

President—C. F. Holton, Savannah
President-Elect—William P. Harbin, Jr., Rome
First Vice President—Rudolph Bell, Thomasville
Second Vice-President—James H. Semans, Atlanta
Secretary-Treasurer—David Henry Poer, Atlanta
Executive Secretary—Sid Wrightsman, Jr., Atlanta

DELEGATES TO THE A.M.A.

Terms expire December 31, 1953:

C. H. Richardson, Sr., Macon
C. L. Ayers, Toccoa, Alternate

Terms expire December 31, 1954:

Eustace A. Allen, Atlanta
William R. Dancy, Savannah, Alternate

EXECUTIVE COMMITTEE

C. F. Holton, President, Savannah
David Henry Poer, Secretary-Treasurer, Atlanta
H. Dawson Allen, Chairman of Council, Milledgeville
W. Bruce Schaefer, Member of Council, Toccoa

COMMITTEE ON AUDITING AND APPROPRIATIONS

J. W. Chambers, Chairman, LaGrange
H. L. Cheves, Union Point
Marion C. Pruitt, Atlanta

COUNCILORS

District	*Term Expires*
1—Lee Howard, Savannah	1955 Session
2—George R. Dillinger, Thomasville	1955 Session
3—W. G. Elliott, Cuthbert	1955 Session
4—J. W. Chambers, LaGrange	1955 Session
5—Marion C. Pruitt, Atlanta	1953 Session
6—H. Dawson Allen, Milledgeville	1953 Session
7—D. Lloyd Wood, Dalton	1953 Session
8—Sage Harper, Douglas	1953 Session
9—W. Bruce Schaefer, Toccoa	1954 Session
10—H. L. Cheves, Union Point	1954 Session

VICE-COUNCILORS

District	*Term Expires*
1—Charles T. Brown, Guyton	1955 Session
2—Carl S. Pittman, Sr., Tifton	1955 Session
3—Guy J. Dillard, Columbus	1955 Session
4—Clarence B. Palmer, Covington	1955 Session
5—John W. Turner, Atlanta	1953 Session
6—H. G. Weaver, Macon	1953 Session
7—M. M. Hagood, Marietta	1953 Session
8—J. A. Leaphart, Jesup	1953 Session
9—Charles R. Andrews, Jr., Canton	1954 Session
10—J. Victor Roule, Augusta	1954 Session

HONORARY ADVISORY BOARD

W. S. Goldsmith	President, 1915-1916
J. W. Palmer	President, 1918-1919
J. W. Daniel	President, 1923-1924
Frank K. Boland	President, 1925-1926
C. K. Sharp	President, 1928-1929
Wm. R. Dancy	President, 1929-1930
M. M. Head	President, 1932-1933
C. H. Richardson	President, 1933-1934
Clarence L. Ayers	President, 1934-1935
B. H. Minchew	President, 1936-1937
Grady N. Coker	President, 1938-1939
J. C. Patterson	President, 1940-1941
Allen H. Bunce	President, 1941-1942
James A. Redfearn	President, 1942-1943
W. A. Selman	President, 1943-1944
Cleveland Thompson	President, 1944-1946
Ralph H. Chaney	President, 1946-1947
Edgar H. Greene (Deceased)	President, 1948-1949
Enoch Callaway	President, 1949-1950
A. M. Phillips	President, 1950-1951
W. F. Reavis	President, 1951-1952

DISTRICT SOCIETIES

OFFICERS AND MEETING DATES

First District

President—A. Bird Daniel, Statesboro
Secretary—Wm. H. Fulmer, Savannah
Third Wednesday—March and July

Second District

President—H. B. Jenkins, Donalsonville
Secretary—Frank A. Little, Thomasville
Second Thursday—April and October

Third District

President—Frank B. Schley, Columbus
Secretary—T. Schley Gatewood, Americus
Third Wednesday in June—Second Wednesday in November

Fourth District

President—J. M. Kellum, Thomaston
Secretary—George W. Brown, Griffin
Quarterly meetings

Fifth District

President—L. Minor Blackford, Atlanta
Secretary—C. Purcell Roberts, Atlanta
March and November

Sixth District

President—E. B. Claxton, Dublin
Secretary—C. H. Richardson, Jr., Macon
Last Wednesday in June—First Wednesday in December

Seventh District

President—S. B. Kitchens, LaFayette
Secretary—R. D. Walter, Calhoun
First Wednesday in April; last Wednesday in September

Eighth District

President—L. W. Pierce, Waycross
Secretary—Sage Harper, Douglas
Second Tuesday—April and October

Ninth District

President—Paul T. Scoggins, Commerce
Secretary—Hartwell Joiner, Gainesville
April and September

Tenth District

President—David R. Thomas, Augusta
Secretary—A. W. Simpson, Jr., Washington
Second Wednesday—February and August.

COMMITTEE APPOINTMENTS FOR 1952-1953

STANDING COMMITTEES

By-Laws: Chapter IX, Sec. 2. Unless otherwise provided in these By-Laws, each of these committees shall consist of three members, each of whom shall serve for three years. One member of each standing committee shall be appointed each year by the President to serve for three or more years as required by each committee and announced at the time of the final meeting of the Association each year. Provided that for the first year the President shall appoint three or more members as required, with one member to serve for the necessary graduated period of years to meet these requirements. Failure of a member to carry out the duties of his committee assignment during any year shall automatically cause his removal at the time of the annual session and the President, with the consent of the Council, shall appoint another member to fill his unexpired term. All committees shall make an annual report in writing to headquarters offices, 60 days in advance of the Annual Session.

Committee on Scientific Work

Thomas L. Ross, Jr., Chairman, Macon

H. Ansley Seaman, Waycross — Charles L. Prince, Savannah
C. F. Holton, Savannah — David Henry Poer, Atlanta

Committee on Legislation

Spencer A. Kirkland, Chairman, Atlanta
Jack C. Norris, Vice Chairman, Atlanta

C. F. Holton, Savannah — William P. Harbin, Jr., Rome
Marcus Mashburn, Cumming — Allen M. Collinsworth, Atlanta
Tully T. Blalock, Atlanta — J. Harry Rogers, Atlanta

Committee on Medical Education and Hospitals

R. Hugh Wood, Chairman, Atlanta

G. Lombard Kelly, Augusta — C. H. Richardson, Sr., Macon

Committee on Medical Defense

Marion C. Pruitt, Chairman, Atlanta

H. Dawson Allen, Milledgeville — C. F. Holton, Savannah

Committee on Professional Conduct

Ralph H. Chaney, Chairman, Augusta

Edgar H. Greene, Atlanta — Enoch Callaway, LaGrange
A. M. Phillips, Macon — W. F. Reavis, Waycross

Committee on History and Vital Statistics

J. Calvin Weaver, Chairman, Atlanta

Ernest F. Wahl, Thomasville — Anne Hopkins, Savannah
Frank K. Boland, Atlanta

Committee on Public Health

C. L. Ayers, Chairman, Toccoa

B. Hollis Hand, LaGrange — Christopher J. McLoughlin, Atlanta

Districts	*Districts*
1—J. M. Byne, Jr., Waynesboro	7—W. C. Mitchell, Smyrna
2—H. M. McKemie, Albany	8—J. B. Avera, Brunswick
3—Frank Vinson, Fort Valley	9—Hartwell Joiner, Gainesville
4—J. M. Bryant, Jr., Newnan	10—J. B. Neighbors, Jr., Athens
5—Ben S. Read, Atlanta	
6—W. D. Hazlehurst, Macon	

Committee on Maternal Welfare

H. F. Sharpley, Jr., Chairman, Savannah
E. D. Colvin, Vice Chairman, Atlanta
Guy V. Rice, Secretary, Atlanta

Charles M. Mulherin, Augusta — Robert B. Martin, III, Cuthbert
Fred H. Simonton, Chickamauga — R. L. Johnson, Douglas

Committee on Rural Health

J. B. Kay, Chairman, Byron

Districts	*Districts*
1—Charles T. Brown, Guyton	6—J. B. Kay, Byron
2—T. Earl DuPree, Bainbridge	7—Wilbur D. Hall, Calhoun
3—	8—L. H. Shellhouse, Willacoochee
4—Clarence B. Palmer, Covington	9—Rupert H. Bramblett, Cumming
5—Ferrol A. Sams, Jr. Fayetteville	10—T. C. Nash, Philomath

Committee on Industrial Health

Allen M. Collinsworth, Chairman, Atlanta
Lester M. Petrie, Vice Chairman, Atlanta

George R. Conner, Columbus — Charles L. Ridley, Jr., Macon
J. B. Peniston, Newnan — Augustus H. Frye, Jr., Griffin
P. L. Hilsman, Albany — John G. Sharpley, Jr., Savannah
Lester Harbin, Rome — W. Bruce Schaefer, Toccoa
T. J. Ferrell, Waycross

Committee on Public Relations

Stephen T. Brown, Chairman, Atlanta
D. Lloyd Wood, Vice Chairman, Dalton

T. E. McGeachy, Decatur — C. F. Holton, Savannah
David Henry Poer, Atlanta — William P. Harbin, Jr., Rome
C. C. Aven, Atlanta

Committee on Cancer

J. Elliott Scarborough, Chairman, Emory University
Hoke Wammock, Vice Chairman, Augusta

David Henry Poer, Atlanta — Everett L. Bishop, Atlanta
Robert C. Pendergrass, Americus — Thomas Harrold, Macon
Enoch Callaway, LaGrange — Lee Howard, Savannah
W. F. Jenkins, Columbus — Neal F. Yeomans, Waycross
John Funke, Atlanta — Kirk Shepard, Thomasville
John L. Barner, Athens — Charles R. Andrews, Jr. Canton
F. D. Eldridge, Valdosta — Major F. Fowler, Atlanta
Lester Harbin, Rome — D. Lloyd Wood, Dalton
Wadley R. Glenn, Atlanta

Cancer Commission (Executive Committee)

Drs. Scarborough, Chairman, Wammock, Poer, Pendergrass, Bishop, Callaway, and Harrold

Insurance Board

W. S. Dorough, Chairman, Atlanta
John L. Elliott, Vice Chairman, Savannah
W. L. Pomeroy, Waycross — D. Lloyd Wood, Dalton
Luther H. Wolff, Columbus

SPECIAL COMMITTEES

Advisory Committee to Woman's Auxiliary

Ralph H. Chaney, Chairman, Augusta
Edgar H. Greene, Atlanta — Enoch Callaway, LaGrange
A. M. Phillips, Macon — W. F. Reavis, Waycross

Committee on Awards

Charles H. Richardson, Jr., Chairman, Macon
Hoke Wammock, Vice Chairman, Augusta
Jules Victor, Jr., Savannah — Edgar D. Shanks, Jr., Atlanta

Committee on Constitution and By-Laws

Allen H. Bunce, Chairman, Atlanta
Enoch Callaway, Vice Chairman, LaGrange
W. F. Reavis, Waycross — C. F. Holton, Savannah
David Henry Poer, Atlanta — John A. Dunaway, Attorney
John W. Simmons, Brunswick — Sam M. Talmadge, Athens

Committee on American Medical Education Foundation

Tully T. Blalock, Chairman, Atlanta
J. M. Byne, Jr., Vice Chairman, Waynesboro
A. G. Little, Jr., Valdosta — C. H. Allen, Bremen

Committee on Revision of Pharmacopeia of U.S.

Allen H. Bunce, Chairman, Atlanta
C. C. Aven, Atlanta — Hal M. Davison, Atlanta

Committee on Blood Banks

Wadley R. Glenn, Chairman, Atlanta
Lee Howard, Jr., Savannah — Edward S. Marks, Marietta
James C. Thoroughman, Augusta

Committee on Abner Wellborn Calhoun Lectureship

Daniel C. Elkin, Chairman, Atlanta
Irvine Phinizy, Augusta — Frank K. Boland, Atlanta
Calhoun McDougall, Atlanta — J. Reid Broderick, Savannah
Guy O. Whelchel, Athens

Medical Advisory Committee to Selective Service System

Carter Smith, Chairman, Atlanta
A. O. Linch, Vice-Chairman, Atlanta
David Henry Poer, Atlanta — William G. Hamm, Atlanta
L. Minor Blackford, Atlanta — Steve A. Garrett, D.D.S., Atlanta
Cyrus W. Strickler, Jr., Atlanta — Charles C. Rife, D.V.M., Atlanta
T. F. Sellers, Atlanta

Committee on Medical Civil Preparedness

Edgar M. Dunstan, Chairman, Atlanta
Robert W. Candler, Atlanta — Charles E. Dowman, Atlanta
Joseph S. Skobba, Atlanta — Charles Eberhart, Atlanta
Alvin E. Siegel, Macon — J. H. Pinholster, Savannah
W. K. Philpot, Augusta — T. J. Ferrell, Waycross
J. Z. McDaniel, Albany — Guy J. Dillard, Columbus
J. S. Holder, LaGrange — Lester Harbin, Rome
J. K. Burns, Jr., Gainesville

Fraternal Delegates to Other States

ALABAMA—Hugh Bickerstaff, Columbus; John McGehee, Cedartown; William H. Wall, Blakely.

FLORIDA—George R. Dillinger, Thomasville; James L. Campbell, Jr., Valdosta; J. A. Leaphart, Jesup.

NORTH CAROLINA—J. Harry Rogers, Atlanta; W. H. Good, Jr., Toccoa; Robert E. Ridgway, Royston.

SOUTH CAROLINA—Ralph O. Bowden, Savannah; Stephen W. Brown, Augusta; A. B. Daniel, Statesboro.

TENNESSEE—Fred H. Simonton, Chickamauga; Robert T. Jones, III, Canton; Robert F. Norton, Rome.

State Board of Health*

First District: James M. Byne, Jr., Waynesboro, Sept. 1, 1957; Second District; A. G. Funderburk, Moultrie, Sept. 1, 1957; Third District; R. C. Montgomery, Butler, Sept. 1, 1954; Fourth District: M. M. Head, Zebulon, Sept. 1, 1955; Fifth District: Spencer A. Kirkland, Atlanta, Sept. 1, 1954; Sixth District: A. M. Phillips, Macon, Sept. 1, 1956; Seventh District; Fred H. Simonton, Chickamauga, Sept. 1, 1956; Eighth District: C. J. Maloy, McRae, Sept. 1, 1956; Ninth District: R. Lee Rogers, Gainesville, Sept. 1, 1956; Tenth District: Thos. W. Goodwin, Augusta, Sept. 1, 1955; *Georgia Dental Association* **—J. M. Hawley, Columbus, Sept. 1, 1952; J. G. Williams, Atlanta, Sept. 1, 1952; *Georgia Pharmaceutical Association***—Preston Sumner, East Point, Sept. 1, 1953; A. T. McRae, Douglas, Sept. 1, 1956.

State Board of Medical Examiners

Fred J. Coleman, Dublin; Edgar H. Greene, Atlanta; J. W. Palmer, Ailey; C. K. Wall, Thomasville; Grady N. Coker, Canton; R. H. McDonald, Newnan; A. M. Deal, Statesboro; Alexander B. Russell, Winder; Rufus A. Askew, Atlanta; W. H. Powell, Hazlehurst.

SECRETARY'S REPORT

NOTE: *The Reporting Service will not complete the proceedings of the House of Delegates for several weeks. So that you may have some information about the general condition of the Association, including finances, this report is published in advance.*

It is with pleasure that I bring you my first report as the active administrative officer of the Association, and Editor of its Journal. In general, the condition of Association affairs is quite satisfactory, and progress has been made in improving our organizational set-up in many fields of activity. However, I would impress on each of you the inescapable fact that there is much more to be done to bring us in line with the progress that has been made in many similar state medical organizations, and with what will be required ultimately in our own state.

1. CENTRAL OFFICES: The offices of the various departments of the Association, including the Public Relations Department, have been brought together at one place to provide

*Nominated by their respective district medical societies and appointed for six-year terms.

**Nominated by their respective associations.

for more efficient administration. Four rooms of large size were made available to us by the Fulton County Medical Society and these are well-lighted and ventilated. A fair amount of storage space is also available in the building. This made it possible to combine the telephone and other facilities of the Association to increase efficiency of operation.

Recommendation: It is not anticipated that more office or other space will be required in the near future. At some time, the housing needs of the Association for the distant future must be considered, and it is recommended that any such plans be combined with those of the Fulton County Medical Society to avoid unnecessary duplication and expense.

2. Personnel: My first activities were directed toward securing an executive secretary to take over, organize and direct the increasing activities of this office, and we were fortunate in securing Mr. Sid Wrightsman, Jr., who assumed the duties on July 15, 1951. Mr. W. D. Gazaway was added to the Public Relations staff on June 18, 1951, on a part-time basis to assist with the preparation and publication of bulletins, programs and other items requiring the use of the multigraph machine. Also Mr. Randolph Fort was asked to assist with the publication of the Journal on September 1, 1951, on a part-time basis. Due to other events, it was necessary to replace the Public Relations secretary on February 27, 1952, and Mrs. Hazel Sibbald is now employed for this purpose.

Recommendations: Sufficient need already exists for the employment of an additional secretary. The work of the various committees and planning for the Annual Session alone will require the services of one person.

3. Membership:

	1952 (As of May 8)	1951 (As of Dec. 31)
Active	1916	2053
Associate	52	136
Life	82	131
Total	2050	2320

It is regrettable that our AMA membership has decreased during the past several years until now we have lost one-third of our representation in the House of Delegates of the American Medical Association. There are now approximately 2900 doctors practicing in Georgia and active measures must be taken by each county society to bring into the Association all who are qualified and desirable, and if this is done we should be able to restore our third AMA delegate by 1953.

The attention of the county societies is called to the provision in the By-Laws which permits membership at half-rate by full-time members of the State and Federal Medical Services (Chapter I, Section 10). Like the recent floods in the mid-West, so-called normal attrition has gotten out of bounds this past year and a number of doctors have been lost through various causes, death alone removing 74 physicians from our ranks.

Recommendation: A planned drive for new members by each component county society in the Association. An incentive might be granted in the form of a cash prize for the best results.

4. District and County Societies: The operation of these societies has changed little, if any, during the year, and in general, some improvement seems in order. Important changes have taken place in some societies, but management usually remains the same. Without pointing the finger of blame at anyone, it is felt that weakness of their societies usually is centered around an inexperienced and too-busy-otherwise secretary. He may be the youngest man to move into the community and has little or no instruction in the duties of the office, or he may be a "can't-say-no" older physician, who has always been secretary, and knows how barely to get under the wire, usually after a few extra requests from this office. Your Association personnel is in a position and stands ready to give assistance to all component societies at all times. We can help secure good speakers for your meetings well in advance, publish notices in the Journal, also, preferably in advance, and even help print and mail your programs if allowed sufficient time. We welcome invitations to your meetings and believe it would be worth while for each society to have a report each year direct from an officer of the Association. A close liaison of this type has not existed everywhere in the past and is highly desirable if we are to stand together in meeting problems and difficulties.

Following a plan used advantageously in other states, a meeting of county and district society secretaries has been scheduled for the second day of the Annual Session. This will give all such officials the opportunity of discussing their problems, and of learning more about the operations, plans and policies of their state and national associations.

Recommendation: (1) An honorarium or other incentive should be provided for all secretaries of component societies, in which the Association should participate and (2) another meeting of secretaries should be arranged at a time when it will not conflict with the Annual Session or other meetings.

5. Annual Session: You will note that considerable effort has been put forth by the Committee on Scientific Work to arrange a type of program for the Annual Session that will provide maximum interest, participation, and attendance. The results will not be known until mid-week, but advance indications point to our most successful meeting. Other features have been considered and may be included in our 1953 Session. The Annual Session has become "big business," with the Association deriving a fair income from its successful operation. Numerous details are concerned, many of which are handled months or even years in advance, and actually this work has swamped the central offices for several months. Even so, much has not been done, and all work has been delayed almost to the danger point.

Recommendation: One secretary to be assigned to this work beginning about December 1st.

6. The Journal: Many changes have been made in the Journal during the year and from all sources these, apparently, have met with approval. It is my desire to increase participation in all departments of the Journal by members in all parts of the state, and encouragement in this direction has followed the appointment of the present editorial staff. The circulation of the Journal needs badly to be increased, particularly within the State to doctors' wives, medical students and to members of related professions and trades. Also, the number of advertisements in the Journal could be favorably increased if adequate personnel was available for this purpose. This relates particularly to local firms and organizations doing business within the state only. Financially, the Journal operates at a substantial profit.

Recommendations: (1) Distribution of the Journal to members of the Woman's Auxiliary, students, and related professions at a reduced subscription rate. (2) Use of an added secretary to assist in handling advertisements for the Journal.

7. Public Relations: As noted earlier, the offices of the Public Relations Department were joined with those of the Secretary by mutual agreement with Dr. S. T. Brown, PR Committee Chairman. This was found to be of tremendous value to the Association because there is no clear line of demarcation between the work done in the two offices. All of us agree that good public relations begins with the average daily activities of a physician, and that some of the special public relations programs were a real part of the general secretarial work of the Association. Also the national interest in public relations work by the American Medical Association seemed well enough established to allow the Association to turn its attention to other important parts of medical organization programs. Perhaps the greatest need in the Public Relations Department is for one or more field workers to carry the program of the Association to the so-called grass roots. Necessarily these will have to come after completion of the organization of the secretarial work, which has been unduly delayed by personnel changes.

Recommendation: That the Public Relations Committee continue to give assistance along with other standing committees in an advisory capacity under the direction and with the full cooperation of the Executive Secretary.

8. American Medical Education Foundation: The American Medical Association has turned its attention on a national level to the problem of financial support to our medical educational institutions, practically all of which are known to be in need of money. The federal government, with its ever increasing paternalistic program, seeks to take over control of medical education by direct support to schools, and this can only be averted by individual support of each physician to the school of his choice. In February, Dr. T. T. Blalock, Atlanta, attended a conference at AMA headquarters to discuss this problem and returned, prepared to spearhead a drive in the state. A central committee of three has been set up, but this will be expanded to include members in each district and in the larger counties. Regular annual contributions of $100.00 or more is the goal of committee, and you are requested to do your part, remembering that your own medical education cost somebody $30,000 or more. In the meantime, a recommendation has been made by our President and President-Elect that the Association start the campaign with a contribution of $10,000.

Recommendation: Full support of the activities of this committee, furnishing necessary secretarial assistance and operating funds.

9. Committee on Rural Health: Up to this year your Association has not had a committee to carry out the well-organized program of the AMA in this field, but under the competent direction of Chairman J. B. Kay, a good start has been taken. He attended a special conference in Denver this spring and returned home ready to organize and direct the program in Georgia. As with other important committees representation of each district will be required. Also, the full cooperation of all component societies in the rural areas will be in order. This work will be done in conjunction with the Agricultural Extension Service of our State University system and it is probable that a state-wide conference will be planned for the near future.

Recommendation: Full support of the work of this committee, supplying such secretarial assistance and supplies as are required.

10. Other Committees: Reports will be heard from the Chairmen of Standing and Special Committees, several of which have been active during the year. In setting up the new Constitution and By-Laws many unnecessary committees that served no purpose were omitted, and it may be possible to drop others upon recommendation of the committee members. On the other hand, new committees are constantly required to meet the changing needs of the Association. Such should include Committees on Blood Banks, Trauma and Diabetes Detection. It should be noted that much of the value of a committee stems from an active chairman, who immediately upon appointment seeks out the problems to be solved. We all know that nothing is automatic in a large organization, such as ours, and all chairmen are requested to ask the assistance of this office in determining committee duties, together with recommended methods of planning programs. Gladly will we furnish all the help that is required, including supplies and clerical workers.

Recommendation: That a standing committee on Committees be appointed, whose duties shall be to recommend the discontinuance of useless committees and the addition of such new committees as are required to the House of Delegates at each Annual Session.

11. Furniture and Equipment: An inventory of all the equipment owned by the Association needs to be brought up to date, and even a casual survey reveals that a fair amount is on hand that is no longer needed. At one time, motion picture and lantern projectors and other electrical equipment was required for meetings over the state, but some of this is now in poor condition, and would require expensive servicing, even for occasional use. This includes 11 16-mm projectors, screens, and sound boxes (one of which was assigned to each district), a fairly new lantern slide projector, and a wire tape recording machine that requires a specially-trained operator. In addition, there is a large amount of shelving and other supplies that was used for exhibits at the Annual Session. In the instance of all the supplies mentioned above, it is now found to be more economical and efficient to have these services furnished by contract. The same might be said for an expensive multigraph machine which was purchased about a year ago. It is convenient to have such work done in the office, but its expense of operation and servicing tends to offset the advisability of its use.

Recommendations: (1) That all such property of the Association be surveyed, and if unneeded, disposed of at the best possible prices obtainable; (2) that a dictaphone or other sound recording machine be purchased to meet an urgent need now existing in the headquarters office because of an increasing staff of clerical workers . . . both for the sake of efficiency and economy; (3) that additional cabinets be furnished to stock properly the large amount of necessary supplies and the increasing number of Journal issues, filed for permanent records.

12. Awards and Lectureships: A close examination of the situation in regard to these important matters reveals the fact that except for one major lectureship fund, the Association now has no other gifts to be used for these purposes. The Calhoun Lectureship Fund is in excellent financial condition with sufficient funds invested to provide a sizable honorarium for a distinguished guest speaker. The fact that the lecture will not be given this year is due to a decision by the committee to have the lecture every second year. The Hardman Cup was filled with names four years ago, and no provision has been made for a replacement to take care of the names of distinguished Georgia physicians added since 1948. The Ware County Hookworm Cup is given for work in a very limited field and will not be awarded this year. Since the management and the prevention of hookworm disease has been so well worked out by our public health authorities, it might be that the donors of this award would consider broadening the scope of its requirements. Other guest speakers this year are being provided by the specialty societies in our state, and for this generous action the Association wishes to express its appreciation. These men have provided much extra interest in our Annual Session, and it is hoped that this generous action will continue.

Recommendations: (1) That the Awards Committee explore the possibility of securing additional awards and funds for lectureships for the Annual Session; (2) that the term "Hardman Cup Award" be discontinued; (3) that the Association again express its appreciation to those who by their generous donations provided the "Abner W. Calhoun Lectureship."

13. Woman's Auxiliary: Again the Association is deeply grateful to the Auxiliary members for the dynamic support that they have given all Association activities during the year. In addition they have carried out a strong program of their own, which has done much to strengthen the position of the publication of a special bulletin which appeared during the year and deserves our sincere compliments. In the future, it is our desire to ask the Woman's Auxiliary for even greater assistance in carrying out many features of our program in Georgia. Special suggestions have been made to Auxiliary officers and it would seem that even a closer liaison will be established between our two groups. It has also been recommended that members of the Auxiliary receive the Journal at half price. In the past the President and other officers of the Auxiliary have travelled to all parts of the state and to the national conventions at their own expense. This is totally unfair since this work is directly for our Association, and should be corrected in the future.

Recommendation: That the $600.00 donation to the Auxiliary be continued and that an honorarium of not less than $200.00 be given to the President to cover part of her travel expenses.

14. Policies of the Association: In the past, apparently, policies have been determined by the House of Delegates, and at times it has been difficult to determine just what the organization stood for and what it hoped to accomplish in the future. The Council has done much to correct this situation during the year by meeting at regular intervals and at a time when it could deliberate without haste or hurry.

It has been most cooperative during the year and I now express my appreciation to each Councilor for assistance rendered me. Some of the problems that confront members of this Association today might be listed for reference only so that our members will be prepared to make decisions when necessity demands. These include:

a. The nursing situation. The shortage increases daily, and the training of practical nurses has not been determined.

b. Control of the healing arts with police power for the State Board of Examiners for violations.

c. A Basic Science Law.

d. Improved and more economical methods of treatment of the mentally ill, including establishment of screening centers in Atlanta and Augusta.

e. Increase in number of new physicians in rural areas.

f. More efficient use of medical personnel in military service to lessen the number of doctors required.

g. Enforcement of a fair medical draft law.

h. Policies to be followed in the new State General Hospital in Augusta.

i. Care of chronically ill patients in the state.

Respectfully submitted,
—David Henry Poer, M.D.
Secretary

TREASURER'S REPORT

GENERAL FUND	1952	1951
Cash Balance	$40,177.92	$39,041.28
Receipts:		
Dues	23,619.00	12,281.75
AMA & Others	746.00	600.97
Journal:		
Advertising	17,500.42	16,131.21
Subscriptions	12,013.50	12,464.75
Annual Session	8,975.00	7,818.00
Interest	1,250.00	1,250.00
TOTAL	$64,103.83	$50,546.68
(Budget estimate for 1952-53	$63,350.00)	
Disbursements:		
Salaries	$16,990.25	$12,450.59
Administration	11,870.42	8,390.70
Publication (Journal)	17,991.63	8,376.18
Annual Session Expense	2,418.36	4,742.29
Withholding and Taxes	2,964.34	2,779.98
PR Expense	4,530.03	10,388.93
Equipment	1,767.20	72.53
TOTAL	$58,532.33	$47,201.20

A copy of the audit made by Ernst & Ernst in April 1952 has been furnished each member of the Council, and a copy is available in the Association Headquarters office for any member to review.

The Association owns U. S. Savings Bonds (Series F) in the amount of $62,262.00 (redemption value). Funds for the Abner W. Calhoun Lectureship Fund are held in trust by the Citizens & Southern National Bank, Atlanta, and may be used only for the purposes set-down by the donor.

It will readily be seen that the Association is in good financial condition, in that disbursements have not exceeded receipts and, actually, our cash balance has increased during the past year.

The Subcommittee on Audits and Appropriations of the Council has studied the financial status of the Association and has prepared a budget for 1952-53. You will note that it allocates practically all anticipated receipts, so that no additional increase in our cash balance seems possible.

Recommendation: To further extend and improve the activities of the Association, a moderate increase in membership dues will be needed. This is particularly true if a sizable donation is made to the American Medical Education Foundation this year, which is not included in the budget.

Respectfully submitted,
—David Henry Poer, M.D.
Treasurer

Fee Schedule for Workmen's Compensation Cases

Average Fee Schedule for Treatment and Care of Injured Employee Miscellaneous

First aid, without sutures	$ 5.00
First aid, requirnig not more than 5 sutures	8.00
More extensive wounds	10.00 & up
Office visits (subsequent) with dressings	3.00
All office visits requiring physical therapy or manipulative procedure	3.00
This fee includes the charge for an office visit unless other treatment is given.	
Night visits to office, 8 P. M. to midnight, plus first aid charge	5.00
Midnight to 7 A. M., plus first aid charge	10.00
Tetanus antitoxin, prophylactic with skin test	2.00

Multiple injuries or those requiring extensive surgical dressings or cases requiring unusual, extraordinary and abnormal after care, the physician will be entitled to additional fees for such proportion of the after care treatment that is in excess of the after care treatment in usual, ordinary and normal cases. Said additional fees for such excess of after care treatment shall be by authorization and arrangement established by agreement between the physician and carrier or employer. Anaesthesia. fees shall be on the basis of hospital charges in each community.

Laboratory, all examinations shall be on the basis of hospital charges in each community.

Testimony before the Industrial Board	25.00
Testimony by deposition	$15.00-25.00
Examination and written report on injured where the examination is made by other than attending surgeon	$15.00-25.00

Fee for any item or procedure not listed on or fixed by this schedule should have same established by mutual agreement between physician and carrier or employer.

OPERATIONS—USUAL TYPE

Exploratory laparotomy with after care	$125.00
Herniorrhaphy, single with after care	125.00
Herniorrhaphy, double with after care	150.00

Hernia.	
Strangulated without resection of bowel, after care	150.00
Strangulated with resection of bowel, after care	200.00
Recurrent, after care	150.00
Tendon sutures, first tendon (after care extra)	
Tendons on dorsum of hand or fingers (one)	35.00
Each additional	10.00
Tendons in palm or hand or fingers (one)	50.00
Complete severance (each additional)	20.00
Special consideration for more severe injuries.	
Removal of spleen, kidney, bladder or any abdominal viscera, after care	200.00
Rupture of kidney with drainage only, after care	125.00
Orchidectomy, after care	65.00
Epididymectomy, after care	65.00
Ruptured urethra, requiring operation	150.00
Ruptured viscus, after care	175.00
Semilunar cartilage, knee, after care without physiotherapy	150.00
Excision bursae, prepatellar, olecranon, without after care	75.00
Skull, requiring decompression, after care	175.00
Skull, compound, including craniotomy, with after care	200.00
Other procedures not listed should have fees determined by mutual agreement with interested parties (Insurance carrier and physician).	

AMPUTATIONS

Finger or toe, without after care	$ 35.00
Each additional finger or toe, without after care	10.00
Arm or forearm, after care	100.00
Hand, after care	100.00
Shoulder, after care	150.00
Leg, after care	100.00
Thigh, after care	125.00
Hip, after care	175.00
Foot, after care	125.00
After care extra if complications arise.	

SURGICAL PROCEDURES

Assistant's fee, minor	$ 10.00
Assistant's fee, major	20.00
Cystoscopy, simple	25.00
Cystoscopy with catherization of ureters for x-ray	35.00
Abscess, incision and drainage, without after care	10.00
Foreign bodies, removed from wounds, without after care	$10.00-25.00
Burns, severe, plus regular office, hospital or home visits	$25.00-50.00
Skin grafts for burns or other conditions, reasonable fee by agreement.	
Other procedures not listed should have fees determined by mutual agreement with interested parties (Insurance carrier and physician).	

DISLOCATIONS

Shoulder	$ 35.00
Elbow	35.00
Hip	75.00
Patella	25.00
Finger or toe	10.00
Jaw	20.00
Carpal bones	50.00
In each case, after care extra. Where open reduction is necessary fee should be doubled.	

FRACTURES — SIMPLE

Colles' or Smith Type	$ 50.00
Forearm (both bones)	50.00
Radius (shaft)	35.00
Ulna only	25.00
Upper arm	50.00
Femur	65.00
Tibia	50.00
Fibula	25.00
Both bones	75.00
Jaw	35.00
With wiring or ext. fixtures	75.00
Ribs	10.00
Patella	25.00
Pelvis	25.00
Metatarsals or metacarpals	20.00
Fingers or toes	15.00
Coccyx or sacrum	20.00
Sternum	10.00
Scapula	35.00
Spine	75.00
Clavicle	35.00
Bone of face, nose, etc.	25.00
Carpal bones	35.00
Tarsal bones	50.00
Compound fractures 50 per cent in addition.	
In each case, after care extra.	

OPERATIONS

Osteotomies for correction of deformity:	
Femur	$150.00
Tibia	125.00
Bone graft, extremities	150.00
Repair or torn rotator cuff	200.00
Operation for acute calcified tendonitis of shoulder	150.00
Excise small bursae	35.00

FUSIONS

Wrist	$250.00
Ankle	200.00
Knee	200.00
Hip	300.00
Shoulder	250.00
Subastragalar or triple arthrodesis	200.00
Spine	300.00
Operations for osteomyelitis, fee shall be by agreement between physician and carrier.	
Fractures of femoral neck or intertrochanteric fractures requiring nailing	$200.00-250.00

X-RAY EXAMINATIONS

Gallbladder:	
Scout film	$ 10.00
Cholecystogram	20.00
Gastrointestinal tract with barium	25.00
Esophagus, alone	15.00
Stomach, alone	20.00
Colon, alone or with barium enema	20.00
Hands (One)	8.50
Hands (Both)	11.50
Head	$17.00-23.00
Hip joint	14.00
Humerus, below shoulder	8.50
Jaw (Upper)	15.00
Jaw (Lower), one side	15.00
Jaw (Lower), both sides	20.00
Knee	11.50
Leg	8.50
Legs (Both)	14.00
Mastoids	17.00
Nasal bones	11.50
Pelvis	17.00
Ribs	14.00
Sacro-iliac joints	11.50
Shoulder	11.50
Sinuses	11.50
Spine:	
One section, A. P. & lateral	$ 17.00
Two sections	23.00
Entire spine	35.00
Teeth, single plate	3.00
Not over six	6.00
Toes, single plate	5.75
Urinary tract:	
Flat plate	11.50
Bladder	11.50
Cysto-urethrogram	15.00
Pyelogram, intravenous	20.00
Wrist	8.50
Wrists, both	11.50
Ankle	8.50

Ankle and foot	11.50
Arm, lower-two-thirds	8.50
Arm and shoulder	11.50
Chest (heart, lungs and great vessels):	
Single view	11.50
A. P. & lateral with fluoroscopic study	15.00
Fluoroscopic study alone	5.75
Clavicle—2 views	11.50
Elbow	8.50
Eye (to determine presence of foreign body)	11.50
Localization	25.00
Facial bones	$11.50-17.00
Femur, lower two-thirds	11.50-14.00
Femurs, both	17.00
Fingers, two views on one plate	5.75
Foot	8.50
Forearm	8.50
Forearm, part including wrist joint	8.50
Forearm, part including elbow joint	8.50
Feet, one foot	8.50
Feet, both (2 feet)	14.00

EYE, EAR, NOSE AND THROAT CONDITIONS

Ordinary removal of foreign body:	
(A) Attached to cornea or conjunctiva (simple embedded)	$ 7.50
(B) Deeply embedded in cornea (requiring use of spud)	10.00
Localization of foreign body inside the eyeball, when necessary, x-ray	25.00
Extraction of foreign body from inside the eyeball (anterior chamber) with or without magnet	75.00
Extraction of foreign body from inside the eyeball (posterior chamber) with or without magnet	100.00
Enucleation of eyeball, including after care	100.00
Iridectomy, including after care	100.00
Complete ophthalmologic examination and report	15.00
Refraction, when authorized by the Commission	10.00
Laceration of conjunctiva:	
(A) Sutures—one to five, after care extra	15.00
(B) Sutures—one to ten, after care extra	25.00
Ectropion—by agreement	
Secondary repair of orbit—reasonable fee by agreement	
Traumatic cataract, unilateral, including after care	100.00
Traumatic cataract, bilateral, including after care	200.00
Office visits—$4.00 per visit after rmoval of deeply imbedded foreign bodies, but not to exceed more than six visits—$3.00 thereafter.	
Laceration of lids:	
(A) Sutures—one to five, after care extra	15.00
(B) Sutures—one to ten, after care extra	25.00
Home visits	5.00
Hospital visits	4.00
Complete examination of ears, for hearing, including audiometer test	15.00
Ruptured ear drum, first visit	10.00
Additional visits	3.00
Mastoidectomy, unilateral, including after care	125.00
Mastoidectomy, bilateral, including after care	175.00
Fractured nose, including after care	50.00
Deviated septum, including after care	75.00
Bronchoscopy, removal foreign body	100.00
Tracheotomy, after care extra	50.00

This fee schedule was approved by Insurance and Economics Committee Jan. 20, 1951, and Council May 14, 1952.

PRESS COMMENT:

Wigs, False Teeth Menaced

In his speech outlining an austerity program for Great Britain, the chancellor of the exchequer indicated that among other things, socialized medicine would receive the hand of the former. Britons may have to buy their own wigs, their false teeth and pay something on every prescription given them by a doctor.

This was the one thing the Labor government thought would be left untouched by the Conservatives, but the people as a whole were told in plain terms that they had to make sacrifices or starve.

Mr. Churchill got $300,000,000 from the United States to help restore his country's sagging economy, but gold reserves will be running out in nine months unless imports are cut and exports are increased, so even socialized medicine will have to feel the pruning knife. —Macon Telegraph.

The People Get Results

We are apt to lose sight in these modern times of the fact that individual initiative, which played so large a part in the development of this country, is still very much alive.

But recently when a local health survey of 20,000 people in Clinton County, Ohio, was needed, the citizens themselves conducted it. When funds were needed for a combination hospital and health center in Alexander County, N. C., it was the local people who raised the money. And in Atlanta, when "screen tests" were offered to check residents for several diseases at one time, the city's Negro community aided the program by staging a mammoth jamboree.

Two other instances of local self-help to health illustrate how the citizens management boards of voluntary hospitals in Minneapolis joined forces and resources to provide better services, and how physicians in Oakland, Calif., cooperated to assure every resident prompt 24-hour medical attention every day.

These stories of local health action to solve personal and community health problems are told in a booklet just published by Health Information Foundation. They are real life stories, and the experiences of these communities—what they accomplished and how they did it—are recorded as guideposts to action by other communities interested in solving similar health problems.

All demonstrate that today, as in the past, the way to better health depends upon the people—upon the people working together, joining all their powers, in a cooperative attack on the problem, with the determination to see it through. —Macon News.

ANNOUNCEMENTS

The 31st annual session of the Southern Pediatric Seminar will be held in Saluda, N. C., July 14-26. Following the plan which was put into effect last year, there will be an additional week (July 28-August 2) devoted to the study of obstetrical and gynecological problems. The Seminar was established and is maintained for the benefit of the general practitioner, and the course given is fully accredited for postgraduate requirements in the Academy of General Practice. Further details may be obtained from Dr. D. L. Smith, Registrar, 187 Oakland Avenue, Spartanburg, S. C.

SOCIETIES

Second District Medical Society held its semiannual meeting on April 3 at the Elks' Club, Tifton. It elected as its 1952-53 officers Drs. H. B. Jenkins, Donalsonville, president; J. J. Collins, Thomasville, vice-president, and Frank A. Little, Thomasville, secretary-treasurer (re-elected). The next meeting of the society will be held in Bainbridge on October 2.

The scientific program consisted of the following papers: "Management of Thrombo-embolic Diseases," Dr. David James, Emory University Hospital, Atlanta; "Surgical Aspects of Acute and Chronic Pancreatitis," Dr. Frank L. Gibson, Bainbridge, and "Primary Carcinoma of the Liver," Dr. Charles C. Lamb, Albany.

Seventh District Medical Society at its meeting at the Dalton Country Club on April 2 chose Dr. H. L. Erwin, Dalton, as president-elect and re-elected Dr. R. D. Walter, Calhoun, secretary-treasurer. Dr. S. B. Kitchens, LaFayette, succeeded to the presidency of the society.

The following scientific program was given: "Case Report of Three Unusual Surgical Conditions in Infants," Dr. Paul Bradley, Dalton; discussion by Dr. Stephen Smith, Rome. "Use of Hormones in the Treatment of Carcinoma," Dr. Lloyd Wood, Dalton; discussion by Drs. William Harbin, Rome, and Murl Hagood, Marietta. "Simple Management of Diabetes," Dr. C. J. Wyatt, Jr., Rome; discussion by Drs. E. S. Brannon, Rome, and W. H. Blanchard, Cedartown. "Medullary Nailing in Fractures of the Shafts of Long Bones," Dr. John J. Killifer, Chattanooga, Tenn.; discussion by Dr. John H. Mull, Rome.

Eighth District Medical Society and its Woman's Auxiliary held their semiannual meetings in Douglas on April 8. In the afternoon the men met at the Douglas Country Club and the women in the Elks Home. Then the two groups came together for a social hour and dinner at the Country Club.

Ninth District Medical Society and the District Woman's Auxiliary each held meetings in the Civic Building, Gainesville, on April 16. At the close of the meetings a Dutch dinner was held. The scientific program for the doctors included talks by Dr. James Brawner, Jr., of Smyrna, on "Some Current Problems of Drug Addiction," and Dr. Tom Harbin, of Rome, on "Recent Development of Eye Surgery." Mrs. Ralph Fowler, of Marietta, president-elect of the Woman's Auxiliary to the MAG, addressed the Auxiliary meeting.

Bibb County Medical Society met at the Georgia State Health Department Building in Macon on April 1, and heard an address by Dr. J. R. S. Mays, Macon psychiatrist, on "Shall I Refer My Patients to a Psychiatrist?" Dr. O. F. Keen presided at the meeting. The Society went on record as favoring the fluoridation of the local water supply, a matter which has been extensively discussed in Macon. The secretary of the Bibb Society was instructed to write a letter to Dr. W. D. Hazlehurst, the Society's representative on the Bibb County Board of Health, informing him of the action.

Muscogee County Medical Society held its monthly meetings at the Standard Club, Columbus, on March 29 and April 22. Speaking at the March meeting was Dr. Reichard Kahle, associate professor of surgery at Tulane University School of Medicine,

whose subject was "Abdominal Surgical Emergencies in Childhood." The April speaker was Dr. Arthur Hertig, of Boston, Mass., acting pathologist at Harvard medical school and pathologist at Boston Lying-in Hospital and Boston Free Hospital, whose subject was "Cancer in Situ."

At the March business session there was considerable discussion of the need and means for improvement of the prevailing coroner system of investigating unexplained deaths and related matters. No official action on the matter was taken at this session.

Randolph-Terrell Medical Society held a dinner-meeting at the Gay Hotel, Cuthbert, on April 11, and heard Dr. Shelley C. Davis, of Atlanta, present a program on "Experiences with Shaw Operation—Cystocele and Rectocele."

LETTERS

Milledgeville, Ga.

To the Editor:

Since returning to Georgia after a year's work at Manhattan State Hospital where patients were received on medical certification, I have always been in favor of doing away with the commitment procedure entirely except where an individual who is usually a paranoid condition in generally good mental contact, could preserve his legal rights by demanding a commitment in the superior courts after a period of observation in a hospital for mental diseases instead of the present situation where such persons now have to remain in jail with no provisions whatever for making bond. I know of one particular case after six months in jail apparently made a good recovery; at least to the extent that the jury felt that she was recovered from the ideas that she had developed against her neighbor and threatening to burn them out. She had also sent through the mail a letter offering $1,000.00 to some gunman who would agree to rub Dr. Hinton out; yet her only plea was that the doctor who had been treating her in jail had given her thyroid and this had cured her of these notions, that she did not want to burn up her neighbors and that she did not want to have Dr. Hinton killed. This patient had previously been committed to the State Hospital by a commission and had in turn employed counsel and asked for a jury trial which was certainly in order, and it was her own wish to remain in jail rather than remain in the State Hospital.

Other distressing situations that I have run into in connection with our law is that a patient apparently recovered completely is still disfranchised unless the same commission that committed her in the Ordinary court rehears the case and declares the patient sane. It seems to me that the physicians at the State Hospital could declare a patient sane as readily as they can declare them not psychotic.

I am reading Jack Spalding's articles with a great deal of interest and certainly feel that he has made the most penetrating study of the situation than anyone they have had at the State Hospital not even excepting the psychiatrists who have come to make surveys in the past. I certainly think the Medical Association should adopt some resolution congratulating the JOURNAL on having such a careful study made.

I also feel that a great deal of a State Sanitarium's possibilities of benefiting patients is greatly impaired by having the building for the criminal insane in the midst of the patients that are sent there for treatment and cure wherever possible. In the earlier days it was unheard of for even the policemen to have a pistol or a club. Of course, automobiles speeding through the grounds might still required that the ground patrol be armed, but pillboxes, high powered rifles and shotguns around the Maximum Security Building has certainly brought about a profound change in the community attitude even in the immediate surroundings of the hospital, as in spite of the name Maximum Security, escapes do occur, a general alarm goes out over the community that dangerous insane prisoners are at large, and everyone goes into some type of fear and runs out armed to join a posse or protect their property; whereas, before this anyone seeing a patient out invited them for a ride in their car and returned them to the State Hospital without fear, or called in notifying the authorities who would send a car out for them. I am sure you know that at one time a group of prisoner patients took one of the shotguns away from the guard, shot off his shoulder, and then made it to the highway where they took a car away from one of the ministers of the community, and all of this has created more disturbance at the hospital than the past escapes of the last 100 years, and I am sure everyone realizes it is impossible to get the nursing help with the greatest missionary spirit to choose work in the Maximum Security Building.

Yours very truly,
H. D. ALLEN, M.D.

Emory University, Ga.

To the Editor:

The article by Dr. Neighbors and Dr. Green "Popliteal Artery Occlusion Presumably by Pressure from Organized Venous Cloth," in the March, 1952, JOURNAL, is certainly a most interesting one. Since it is the first case of this type that I have seen reported and since the cause of gangrene of the extremity does not seem adequately explained, I would suggest that the authors be absolutely certain of their impressions.

As you know, acute thrombophlebitis can be associated with such severe vasospasm that gangrene of the foot can result. This thrombosis, however, is usually femoral iliac in location.

Sincerely yours,
F. W. COOPER, JR., M.D.

Chicago, Ill.

Dr. Edgar M. Dunstan, Chairman
State Preparedness Committee
Medical Association of Georgia
Atlanta, Georgia

Dear Doctor Dunstan:

This letter is being addressed to you in your capacity as chairman of the State Preparedness Committee of your State Medical Society. It is the hope of the Council that you will be able to assist us in connection with a problem with which we are presently confronted.

As you may or may not be aware, Regional Offices of the Federal Civil Defense Administration are authorized to employ a full time Medical Director to handle medical civil defense problems arising within such regional geographical areas. To date the Federal Civil Defense Administration has encountered difficulty locating physicians qualified and willing to accept these positions. In view of the urgency for hiring medical directors at the earliest possible date, the Council is attempting to assist in locating qualified individuals. I have enclosed, for your information, a list of the states included in the nine civil defense regions, and the official job description for this position which pays $10,800 per year.

You will be performing a real service if you will publicize this information within your community and your circle of acquaintances. If you know of persons who are or may be interested, please supply me with their names and addresses at your earliest convenience . . .

Sincerely yours,
C. Joseph Stetler, Secretary
Council on National Emergency
Medical Service of the
American Medical Association.

DEATHS

GARNER: *Dr. James Samuel Garner,* 72, died at his residence in Rome on April 16 after a week's illness. Born in Gwinnett County, he attended Atlanta schools, then the Georgia College of Eclectic Medicine and Surgery, from which he was graduated in 1908. The following year he moved to Rome, where he had practiced ever since. Among his survivors is Dr. Sam Garner, Jr., of Rome, a son.

MORGAN: *Dr. David Emmett Morgan,* 73, died at his home in LaGrange March 20 after having been in poor health for a year. Born in Heard County, he moved to LaGrange as a child. First was graduated as a pharmacist from the University of Maryland, and owned and operated a drug store in LaGrange. Then he sold this business to attend Atlanta Medical College, now Emory University School of Medicine, from which he received his degree in 1906.

PEELER: *Dr. Julian Edwin Peeler,* 82, longtime Woodland physician and civic leader, died at his home February 14. Born in Washington County, he was graduated from the Medical College of Georgia. Was a director of the Woodland Bank and for 40 years deacon in the Valley Grove Baptist Church.

SHAW: *Dr. M. F. Shaw,* 65, who had practiced in Omega for 30 years, died in a Thomasville hospital on April 2. He had been ill for two years, seriously ill for three weeks. Was a 1912 graduate of Atlanta School of Medicine, now Emory University School of Medicine. Before going to Omega he had practiced in Berrien, Lowndes and Dougherty Counties.

STEWART: *Dr. J. A. Stewart,* 72, died at his home in Portal March 25 after a long illness.

TAYLOR: *Dr. John Cephas Taylor,* 66, retired physician and surgeon, died March 25 in LaGrange, where he had practiced 28 years. Born in Randolph County, Alabama, he was graduated from the Emory University School of Medicine.

AUXILIARY

Muscogee County Auxiliary at its April 16 meeting presented City Hospital, Columbus, a check for $300 to be used as a scholarship for a student nurse in that hospital. Speaker at the meeting was L. P. Patterson, chairman of the nursing committee of City Hospital, who discussed the great need for nurses and asked members of the Auxiliary to attempt to interest girls in careers in the profession of nursing.

Another speaker was Miss Edith Newlin, who told the group about the breeding and use of Seeing-Eye dogs. Mrs. R. A. Chipman was appointed recording secretary of the group. Hostesses at this meeting were Mrs. Chipman and Mrs. George Comstock.

Seventh District Auxiliary has as its new officers Mrs. Alfred Colquitt, Marietta, chairman; Mrs. Bruce Burleigh, Marietta, vice-chairman, and Mrs. George C. Cauble, Jr., Acworth, secretary. The district Auxiliary met at the Dalton Country Club on April 2, and heard addresses by Dr. John J. Killifer, of Chattanooga, Tenn., and Mrs. J. R. S. Mays, of Macon, 1951-52 president of the Woman's Auxiliary to the MAG.

PERSONALS

Dr. Kathleen Byers, of Atlanta, was awarded certification as a Diplomate of the American Board of Anesthesiology on March 26. She recently was appointed chief of Section Anesthesiology at Veterans Administration Hospital, Chamblee.

Dr. Richard Porter Campbell, of Fayetteville, was married to Mrs. Frances Durham Mobley, of Decatur, on March 15 at Holy Trinity Episcopal Church in Decatur.

Dr. Arthur B. Codington announces the removal of his offices to 534 Candler Road, Decatur.

Dr. James A. Kaufmann announces the opening of his offices for the practice of internal medicine at 34 Seventh Street, N. E., Atlanta.

Dr. A. M. Knight, Jr., of Waycross, addressed the Rotary Club of Blackshear Apr. 8.

Dr. B. G. Owens, of Valdosta, spoke before the Rotary Club of that city Apr. 16 on the contributions made to medicine, and particularly to surgery, by Dr. Crawford W. Long and Joseph Lister.

Dr. Samuel R. Poliakoff announces the removal of his offices to 28 Eighth Street, N. E., Atlanta. His practice is limited to obstetrics and gynecology.

Dr. A. W. Rehberg, of Cairo, in an address before the Kiwanis Club of that city on Apr. 16 strongly denounced socialized medicine and presented arguments against it.

Dr. Paul Rieth, Atlanta orthopedic surgeon, was honored recently at the American Academy of Orthopedic Surgeons meeting in Chicago when the surgical procedure "Prop-Latch Spine Fusion Combined with Total Laminectomy" received first award of the audio-visual program. This combined operation for disc lesions was developed by Dr. Rieth and Dr. Edgar Fincher at Emory University School of Medicine.

Dr. Richard L. Schley, Jr., of Savannah, last month was elected chairman of the Georgia Democratic League, Savannah political party.

Dr. Raymond F. Spanjer, of Cedartown, spoke before the Aragon Parent-Teacher Association March 27 on "The Role of Public Health in Your Child's Life."

Dr. Hoke Wammock, of Augusta, in March made a trip to Florida to lecture in the interests of the program of the Florida Division of the American Cancer Society.

Dr. C. H. Watt, of Thomasville, on March 31 spoke before the Waycross Interdenominational Women's Missionary Society on "How Thomasville Put the Bible in Its Public Schools."

HOSPITALS

Forty-one hospitals in Georgia are approved or provisionally approved by the American Colleges of Surgeons, according to a list appearing in the March bulletin of the college. The roster of approved institutions is as follows:

Atlanta, Crawford W. Long Memorial, Georgia Baptist, Grady Memorial, Henrietta Egleston Hospital for Children, Piedmont, Ponce de Leon Eye and Ear Infirmary, St. Joseph's Infirmary, United States Penitentiary Hospital, Scottish Rite Hospital, Emory University Hospital; *Albany,* Phoebe Putney Memorial Hospital; *Alto,* Alto Medical Center; *Americus,* Americus and Sumter County Hospital; *Athens,* Athens General Hospital, St. Mary's Hospital; *Augusta,* University Hospital.

Brunswick, Brunswick City Hospital; *Columbus,* Columbus City Hospital; *Cuthbert,* Patterson Hospital; *Donalsonville,* Donalsonville Hospital; *Eastman,* Eastman Hospital; *Griffin,* Griffin Spalding County Hospital; *LaGrange,* City-County Hospital; *Macon,* Macon Hospital, Middle Georgia Hospital; *Marietta,* Kennestone Hospital; *Milledgeville,* Richard Binion Clinic Hospital; *Moultrie,* Vereen Memorial Hospital.

Rome, Battey State Hospital, Floyd Hospital, McCall Hospital; *Sandersville,* Rawlings Sanitarium; *Savannah,* Central of Georgia Railway Hospital, Charity Hospital, St. Joseph's Hospital, Warren A. Candler Hospital; *Thomasville,* John D. Archbold Memorial Hospital; *Valdosta,* Little-Griffin Hospital; *Warm Springs,* Georgia Warm Springs Foundation; *Waycross,* Atlantic Coast Lines Hospital, Ware County Hospital.

After several years of constant effort by an interested group of doctors, plans for a new 300-bed general hospital in Savannah are finally taking shape. General population increases, new industries and a large Air Force base have combined to outstrip existing facilities, which have not been improved for the past 25 years. Full intern and residency programs with teaching and research objectives are being organized.

The following lecturers recently have addressed the staff of the Veterans Administration Hospital in Dublin: April 9, M. H. Kniseley, Ph.D., chairman of the department of anatomy, Medical College, State of South Carolina, on "Sludged Blood"; April 16, Dr. Reuben M. Reifler, consultant in dermatology, Macon, "Infections of the Skin (Pyogenic, Fungus, Scabies, Parasitic and General)"; April 17, Dr. W. M. Nicholson, Duke University, "Some New Developments in the Diagnosis and Treatment of Thyroid Disease"; May 22, Dr. Peter B. Wright, orthopedic surgeon, Medical College of Georgia.



Groups of junior and senior students from Georgia medical schools and their wives were entertained by Eli Lilly and Company at its Indianapolis plant in March. This is the group from the Medical College of Georgia which visited the Lilly plant March 5-7. From left, first row: John R. Waters, Eli Lilly representative, Thomas Elson Hamilton, Mrs. Hamilton, Alfred Joseph Green, Burton Blaksley Barmore, Jr., Mrs. O'Rear, Dr. Harry B. O'Rear, Daniel Simon deLaPenha, Mrs. deLaPenha, Louis Andrew Williams, John Rhodes Haverty, Mrs. Haverty, John Phinizy, Mrs. Phinizy, David Theodore Smiley. Second row: Hewlett Edwin Aderholt, Jr., John Edward Allen, Jr., Mims Crowell Aultman, Dorothy Smith, Norman Pease Gardner, Roy Gordon Duncan, Harry Jordan, Joseph M. Garrison, Mrs. Garrison, Murray Robert Gordon, Sanford Abram Shmerling, Robert Charles Shuman. Third row: Mrs. E. H. McHaffey, with Eli Lilly and Company, Wallace Wilson Fleetwood, Jr., Miss Anne Fleetwood, William A. Wood, Jr., Marcella DiVenuto, William W. Hillis, Jr., Robley D. Smith, Jr., Mrs. McCormick, John T. McCormick, Martha Susan Goddard, Augustus Baldwin Dudley, Jr., James Reuben Clay.

LILLY *is Host to* STUDENTS

Emory University School of Medicine students who were entertained by Lilly March 9-11 are shown in this picture. From left, first row: Eli Lilly representative, David S. Hubbard, Maxwell F. Hall, Jr., Mrs. Hall, Timothy Harden, Jr., Mrs. Harden, Allen Macris, Hugh S. Thompson, Mrs. Thompson, Royce Hobby, Conway W. Hunter, Mrs. Wilson, Frank L. Wilson, Mrs. Reeves, W. Harrison Reeves. Second row: Tom W. Leland, Clyde H. Gunn, Jr., Frank T. Robbins, Mrs. Robbins, Litell S. Baird, Mrs. Baird, Charles E. Wells, Charles K. Wright, James M. Major, Malcolm E. Noel, Jr., Eli Lilly representative. Third row: John A. Ward, Thomas P. Scott, Marion H. Rice, George W. Selby, Frank W. Wouters, Harrison Rogers, Mrs. Rogers, Fanning C. Miles, Jr., Julian R. Youmans, Walter K. Long, Jr., Thomas L. Buttram, Richard E. George. Fourth row: Christopher J. Walker, Jr., Francis B. Schley, Jr., Arthur C. Beall, Jr., William L. Eubanks, William E. Huger, Clare Charles Hugan, Jr., Mrs. Dobbs, William H. Dobbs.



PROFESSIONAL

The fourth annual meeting of the *American Academy of Forensic Sciences,* held at the Biltmore Hotel, Atlanta, March 6-8, featured reports and addresses by some of the nation's outstanding pathologists, toxicologists, bacteriologists, psychiatrists, criminologists and fingerprint experts.

Among the speakers were: Dr. Samuel A. Levinson, president of the Academy and professor of pathology at the Illinois College of Medicine; Dr. Val Beyer Satterfield, St. Louis, Mo., psychiatrist; Dr. Geoffrey T. Mann, chief medical examiner for the state of Virginia; Dr. Harold L. Beddoe, Medical College of Virginia; Dr. Gordon R. Hennigar, University of Virginia; Dr. Robert K. Waller, Virginia medical examiner's office; Dr. R. B. H. Gradwohl, St. Louis, a founder of the Academy; Dr. Louis J. Reagan, Los Angeles, Calif.; Dr. Arthur C. Meyers, Jr., St. Louis University; Dr. Theodore J. Curphey, chief medical examiner, County of Nassau, New York; Dr. William E. B. Hall, director of laboratories, Chambersburg (Pa.) Hospital; Dr. Louis Barail, Hoboken, N. J.; Dr. Edward L. Miloslavich, St. Louis; Dr. Walter H. Sheldon, Emory University School of Medicine professor of pathology, and Dr. Ivan Bennett, of Atlanta.

SCHOOLS

Two postgraduate courses will be offered next fall by the Emory University School of Medicine, it was announced this week by Dr. Russell H. Oppenheimer, director of medical postgraduate education at Emory.

The courses are expected to attract about 100 physicians each. One, on general medicine and surgery, will run the week of October 6, and the other, on cardiology, the week of October 20. The first is open to general practitioners in the region, and will be given by Emory in cooperation with the Medical Association of Georgia and the Georgia chapter of the American Academy of General Practice.

The cardiology course will be of interest to heart specialists throughout the country, Dr. Oppenheimer declared. Guest speakers scheduled are: Dr. George E. Burch, professor of medicine, Tulane University Medical School; Dr. Richard Bing, professor of experimental medicine and clinical investigation, Medical College of Alabama; and Dr. Eugene Stead, professor of medicine, Duke University Medical School.

Dr. Edgar R. Pund, professor of pathology in the Medical College of Georgia, addressed a combined meeting of the medical staff of the Veterans Administration Hospital, Dublin, and the members of the Laurens County Medical Society, at the hospital on April 4. His topic was, "Pathogenesis and Classification of Carcinoma of the Lungs."

MISCELLANY

Vigilance and prompt action paid off when a medical public relations problem arose recently in Savannah.

Savannah papers featured the story of a patient who died because he was unable to obtain hospitalization or the services of a doctor, and the initial reaction was one of public indignation. Within 24 hours, the publicity committee of the Georgia Medical Society had made an investigation and the press the following day carried a complete explanation which exonerated the doctors and hospitals.

Facts were that this patient had been hospitalized repeatedly at no cost to himself, that he had been seen by numerous medical and surgical consultants at no cost to himself, and that an operation for a large gastric ulcer had been advised on three occasions but had been refused each time. The patient had been told that the operation would be performed at no cost. Ironically, autopsy revealed the ulcer to have been benign.

Eli Lilly and Company, in accordance with its long-established policy, is replacing all Lilly products in pharmacies and hospitals ravaged by the flood in the Missouri and Mississippi River Valleys. Lilly representatives in a dozen states have been directed to make the replacement of flood-damaged Lilly pharmaceuticals and biologicals their first order of business.

Three Savannah doctors were awarded first prize for original investigation at the meeting of the Southeastern Section of the American Urological Association held at Boca Raton, Fla., on April 5. The prize went to Drs. Peter L. Scardino, Charles L. Prince and Thomas A. McGoldrick, Jr., for their paper on "The Effect of Adrenalectomy on Prostatic Cancer." The authors reported three cases, the eldest of whom was living and well at the time of the report, 10 months post adrenalectomy. All cases had escaped conventional treatment and were considered morbiund at the time of operation. It was noteworthy that these were managed successfully with only limited laboratory and research facilities available.

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI JUNE, 1952 NUMBER 6

Editorials

WHAT PRICE POLITICS?

1952 AMA Annual Session

The 1952 Annual Session of the American Medical Association held in Chicago June 9-13, with physician registration well over the 10,000 mark (including 65 members from this Association), by no means was short on highlights of special significance to all members. And particularly was this true with respect to the pre-convention kick-off Conference of Presidents and other State Society Officers, together with the stormy sessions of the House of Delegates which followed.

This being a decisive election year, it was not surprising that aspects of national politics overshadowed much of the proceedings.

Few punches were pulled by Clarence Manion, Dean of the Notre Dame University Law School, and Congressman Walter H. Judd, M.D., of Minnesota, both of whom addressed the State Presidents Conference and made no bones about the fact that our federal government today has grown too big, has all too frequently overstepped its bounds, and that its curtailment perforce will depend on the active political activity of doctors, as well as lawyers and other professional groups. Our American freedoms, they made clear, are today in a precarious position and physicians cannot afford to remain disinterested.

The initial meeting of the AMA House of Delegates, although getting off to a placid start in routine procedures, very shortly was transformed into a stormy gathering on introduction by the Illinois delegation of a resolution which bitterly condemned President Truman's Commission on the Nation's Health Needs and verbally castigated its chairman, Dr. Paul B. Magnuson. This resolution served as a spark which touched off heated controversy in the House during the succeeding days.

Referred to the Reference Committee on Legislation and Public Relations, it was debated on during the second day at an open hearing where there was standing room only, mainly because of the personal appearance of Dr. Magnuson who was present to clarify his position on the Commission and to offer background on its appointment by the President.

The two schools of thought on the matter among the AMA delegates were (1) that any official criticism of the Commission and its work by the House of Delegates logically should be delayed until its work had been completed and its findings revealed next winter and (2) that the AMA should unhesitatingly condemn the Commission at the outset as a mere political device to open the door for socialized medicine. Finally, a compromise resolution, greatly softened in tone, was adopted which proved satisfactory to delegates of both hue.

Two items of general interest which were favorably acted on by the House included the recommendation that a Congressional amendment limiting the taxing power of the federal government be drawn up and adopted at the earliest possible date and a recommendation that the AMA Board of Trustees appoint a special committee to study and consult with the American Osteopathic Association in regard to improving osteopathic education and allowing doctors of medicine to teach in osteopathic schools without being considered unethical.

As for the question about medical treatment for veterans with non-service-connected disabilities, the House again failed to come up with a solution and the matter was referred for further study to a special committee which was requested to report finally on the subject at the 1952 Interim Session at Denver.

The GP *and the* SPECIALIST

As the trend towards specialization swings back towards emphasis on the general practitioner, it is well to call attention to a few of the practices of specialists that can make the GP reluctant to refer patients to him.

First and foremost is the rare specialist who fails to return the referred patients as soon as possible. Instead, he keeps the patient returning for checkups until you wonder who is the family physician. Then the only need for the GP is for emergencies and convenience. On the other hand, there are specialists who do not prescribe for your patient, but phone or write you their suggestions and return the patient to you for treatment.

If specialists realized how universal the interest of a small town was in the welfare of its citizens, they would be quicker to keep the referring family physician posted on the condition of a seriously ill patient by phone. It is embarrassing to learn from your barber that Mrs. Jones was operated on yesterday. However, one must be careful of long distance phone calls, for small town telephone operators quite often listen in and spread the news over town.

Next in importance only to accurate diagnosis and treatment is the prompt writing of a comprehensive but concise report on findings, diagnosis, and recommendations for treatment. The phone is fine for progress and dismissal reports, but not for the final report. Records are now kept by most physicians and a written report from the consultant is necessary for a complete record. No one cares to wade through a manuscript full of negative findings; but a clear, concise report is always appreciated and expected. A specialist who is too busy to summarize his findings and report his suggestions or treatment in writing, is too busy to give a patient the time necessary for the proper evaluation of a difficult case.

Finally, undue delay in reporting to the family physician evinces a lack of interest in the patient. The crowning insult is for the patient to receive the consultant's statement before his physician has received and passed on to him a final report.

—Frank Vinson, M.D.

EDGAR HILL GREENE, M. D.

Emory University School of Medicine graduated in 1915 a young man who was destined to achieve success, not only in his chosen field of surgery and gynecology, but who was to hold many positions of leadership and trust in his Church, in his community and in organized medicine.

Edgar Hill Greene was born in Shellman, Ga., Jan. 22, 1889, the son of Charles J. and Emma Elizabeth Gaskin Greene, a direct descendant of General Nathaniel Greene, of Revolutionary fame, and a great nephew of Benjamin Harvey Hill, Confederate Statesman and Senator from Georgia.

He was graduated from Shellman Institute, Emory College at Oxford, and received his degree as Doctor of Medicine in 1915 from Emory University School of Medicine, Atlanta. After a year's internship at the Willard Parker Hospital in New York, he returned to Atlanta to continue his training at the Davis-Fischer Sanatarium (now the Crawford W. Long Memorial Hospital). He promptly attracted the attention of Dr. E. C. Davis, who took a special interest in developing his surgical talents, an interest he repaid with devoted loyalty to his chief.

In October, 1917, Dr. Greene was assigned to active duty in the Medical Corps of the U. S. Army, and served as a First Lieutenant in the Medical Corps until 1919. From 1918 to 1919 he served with the AEF in France, and was decorated by the French government for his services during World War I with Purple Ribbon and Silver Palm.

Returning to Atlanta, Dr. Greene was instructor of gynecology at Emory from 1919 to 1925, at which time he was appointed assistant professor of gynecology. From 1923 to 1940 he served as a Major in the Medical Officers Reserve Corps and as a Major of the Georgia National Guard. He retired from military service as a Lieutenant Colonel in the Medical Reserve Corps after 23 years of service.

Dr. Greene was a trustee of the Good Samaritan Clinic. In 1937 he was elevated to the presidency of the Georgia and A. & W. P. Railroad Surgeons Association. During 1941 and 1946 he was President of the Atlanta Alumni Club, Phi Delta Theta Fraternity. In 1940 he organized medical personnel for local and advisory boards for selective service in Georgia, and served as state medical adviser until 1943.



EDGAR HILL GREENE, M.D.

As Chairman of American Preparedness Committee of the Medical Association of Georgia in 1940, he was active as chairman of the procurement and assignment service for physicians, dentists and veterinarians. He was also chairman of the Fourth Service Command Committee for procurement and assignment service for physicians, dentists and veterinarians in 1942. For this work he received a presidential citation.

Dr. Greene was a Fellow of the American College of Surgeons and an Officer d'Academie Beaux Arts, France; a charter member of the Southeastern Surgical Congress; a member of the Fulton County Medical Society, the Medical Association of Georgia, the Southern Medical Association and the American Medical Association. He served as president of the Medical Association of Georgia from 1948 to 1949.

He also held memberships in the Scottish Rite Masons, the Shrine, Capital City Club, National Sojourners, Old Guard Battalion of the Gate City Guard, American Legion, Military Order of World Wars, Phi Delta Theta and Theta Kappa Psi fraternities.

He is survived by his wife, the former Miss Annabel Burkhead, of Opelika, Alabama, and Grottoes, Virginia, whom he married in 1924. Also surviving are a son, Edgar Hill Greene, Jr., and a sister, Mrs. J. E. McGlaun, Shellman.

The Methodist Church has lost a loyal steward, our country a great patriot, Atlanta a public-spirited citizen, his patients a beloved surgeon, organized medicine a stalwart leader, and we, the members of the Medical Association of Georgia, have lost a dear friend in the passing of Edgar Hill Greene.

—L. Minor Blackford, M. D.
and
—Shelley C. Davis, M.D.

The Physician's COMMUNITY

The American man of medicine has achieved some degree of success as a scientist and practitioner and more recently as a business man but is in serious danger of losing his contact with and influence upon the human community. There has been a notable loss of intellectual leadership and independence among American doctors when one compares the ruggedly independent physician of the 90's with the finely trained scientist of today.

Is the price of specialization our cherished heritage of community service? True enough, the physician renders service much of which is charity, unselfishly, but this charity is only a small measure of his obligation to community life. This charity of time and service is merely a facet of his duty and obligations of the profession which he assumes when he enters medical school.

The growing attitude of the "Ostrich in the Sand" among this generation of physicians is a disservice to both the community and the profession. While one might long for the halcyon days of medicine, times have changed and the demands upon the physician are no greater than the increased demands upon all citizens as the result of our increasingly complex community life.

We gain little in our war against socialized medicine if we win the battle against bureaucracy but lose the confidence of our community. In the past the

physician has contributed much to community improvement. His special training has prepared him to think logically; to act decisively and impartially; to separate the wheat from the chaff and more significantly to contribute selflessly. No other member of the community owes so much. None is better prepared to give so much. A glance over the passing scene is encouraging however. We see emerging out of the great scientific mass the civic minded doctor. Slowly but surely the physician is shedding the shackles of apathy and indifference to community needs over and above his medical duties. One sees everywhere physicians in attendance at civic clubs, political gatherings, community projects and in some places occupying the leadership. Let us hope that this is the first evidence of the gusher of interest in community affairs by the new generation of American physicians.

—Peter L. Scardino, M.D.

Give the PUBLIC MORE INFORMATION *Like This*

The 'Douglas' Plan

In recent issues of the Coffee County Progress there has appeared a Professional Directory listing the names and telephone numbers of all doctors, dentists, veterinarians and optometrists who practice in Douglas. Also is listed the office and residence telephone numbers of the Douglas Hospital, the Coffee County Health Department, and, most important of all, the numbers and names of the druggists for "Night Prescription Service Calls". This appears over the names and numbers of two drug stores.

Above the directory there appears a personal message to the public calling attention to the necessity for good medical services and this is changed in each issue.

The *Journal* knows of no better example of a good working relationship between related professional groups and recommends it to your town, city or county for a trial.

The COUNTY SOCIETY:

Its Price of Membership

One of the most thought-provoking articles in recent months on a member's debt to his county medical society and techniques to stimulate delinquent membership appeared in the April issue of *The Journal of the Tennessee State Medical Association,* by Dr. Joe L. Raulston of Knoxville.

It is Dr. Raulston's contention that membership in organized medicine is too easily obtainable these days. Such a viewpoint is not unlike that held by a number of county society officers in this Association.

Dr. Raulston points out that when a physician becomes a member of his local medical society, he is thereby granted certain privileges on a lifetime basis: "to practice and enjoy the benefits and protection of an organization whose history is replete with sacrifice and whose glory is in its constant endeavor to improve its services to mankind."

On the other hand, he questions what a member

gives in return for the privilege of membership in the profession. Such obligation, in too many cases, is limited merely to ethical conduct and payment of dues, he says. Assuredly, a member's assumption of so slight an obligation is not enough if a progressive medical society is the goal of a minority of its members.

Furthermore, the age-old charge about a county society being run by a "same old crowd" too often is unjustified. That "same old crowd," Dr. Raulston emphasizes, probably is forced into guiding society affairs because too few will take the time or trouble to attend meetings.

He states: "It is called to the attention of the membership of all component societies of a state organization that membership in the local society is a prerequisite to membership in state and national associations, in specialty groups, and on hospital staffs. It is obvious that if membership is so eagerly sought after in the higher echelons of medicine, then the attainment of membership in the local society, which is a prerequisite to membership in the higher echelons, should not be so lightly taken as it is by some men."

Here are some excellent suggestions that he makes for stimulating delinquent membership:

1. The minimum requirement for renewal of membership in the local society at yearly intervals should be attendance of at least one-third of the stated meetings of that society.

2. Acquirement of membership on the active staff of at least one hospital, local conditions permitting.

3. The appointment of an Attendance Committee to telephone members and urge their attendance, to make personal calls on delinquent members and to request the president to write special letters to the delinquent members to encourage their participation. (In this regard, Dr. Raulston advises use of the Rotary Club technique which does not tolerate lax attendance.)

Among other suggestions, he recommends that a longer prohibition period, possibly one year with courtesy privileges, be a prerequisite to membership in a local society. It is also his suggestion that the Society Program Committee encourage younger members, particularly those of a timid or reticent personality, to write papers or speak at meetings.

Suffice it to say that Dr. Joe L. Raulston has hit some nails squarely on the head.

Isonicotinic Acid Hydrazide in (INAH) IN TUBERCULOSIS

RUFUS F. PAYNE, M.D.

The recent announcement of the use of isonicotinic acid hydrazide in the treatment of tuberculosis[1 2 3] in the medical literature has confirmed the fears of medical men that the drug was not a specific bactericidal agent against the mycobacterium tuberculosis and while it has dimmed their optimism momentarily, it has, nevertheless, challenged the medical profession to learn more about the manner in which it acts and to determine as rapidly as possible its place in the treatment of this dreaded plague.

The reports in the literature indicate that the drug, in the dosages used, does not cause rapid changes in the pathology of the disease, as determined by changes in x-ray appearance; neither does it cause the disappearance of tubercle bacilli from the sputum as determined by smear and concentration techniques, in all or even a majority of cases treated to date; neither does it destroy all the organisms in the tissues of experimental animals whose induced disease has been brought to an apparent arrest and there is some evidence that toxicity may interfere with its use in persons with previously damaged kidneys as well as certain individual intolerances to the higher doses.

On the other hand the drug has many hopeful and intriguing possibilities in that it is easy to manufacture; is cheap in price; can be given orally; penetrates

Battey State Hospital, Rome, being coordinated by the Division of Chronic Diseases and Tuberculosis of the United States Public Health Service.

NOTE: Since this article was written the official name adopted for insonicotinic acid hydrazide is "Isoniazid".

the tissues readily, particularly the brain and spinal fluid; it can be given over long periods of time in therapeutic doses to the great majortiy of patients; is effective against strains of tubercle bacilli which are streptomycin resistant and since it is a relatively simple organic compound there is the possibility that still more effective derivatives can be developed.

Investigators have turned their attention toward the unknowns of the new drug and many clinical trials are underway both by individuals and by teams. The United States Public Health Service through its Division of Chronic Disease and Tuberculosis is acting as both a sponsoring and coordinating agency for a clinical trial of the new drug by 15 different hospitals throughout the United States and Battey State Hospital will furnish a large number of cases for the study.

Only pulmonary cases are being selected and each investigator is furnishing identical data covering past history, bacteriological proof of etiology, previous treatment, clinical signs and symptoms covering febrile reaction, cough and amount of sputum and stage of the disease. Cases are submitted weekly and, by statistical methods, cases are selected for each of three treatment regimens. Regimen A will consist of streptomycin twice weekly and para-aminosalicylic acid daily. Regimen B will consist of streptomycin twice weekly and INAH daily. Regimen C will consist only of INAH daily. Since Battey is larger than the other hospitals two additional regimens are being used among our patients. Regimen D will consist of INAH daily and para-aminosalicylic acid daily. Regimen E will consist of INAH and para-aminosalicylic acid daily and streptomycin twice weekly. In addition there will be three pilot groups of 25 cases each among Battey patients to test the drug on an interrupted schedule. Regimen F will consist of INAH twice weekly and para-aminosalicylic acid daliy. Regimen G will consist of INAH twice weekly, streptomycin twice weekly and P.A.S. daily. Regimen H will alternate streptomycin twice weekly with INAH twice weekly.

PA and lateral films will be taken when treatment is started and PA films will be taken at monthly intervals with such additional x-ray studies as are necessary to follow the progress of lesions, particularly cavities. Auxiliary methods of treatment such as temporary collapse, resection and thoracoplasties are encouraged.

Clinical data concerning cough, amount of sputum, weight changes, febrile reactions and evidence of drug toxicity are reported at regular intervals in a standard method by all investigators.

Sputum examinations, including cultures, are taken at specified times by all investigators and reported. All cultures showing growth of tubercle bacilli are sent to a central laboratory for determination of resistance to the various drugs employed.

The clinical data will be collected and analyzed monthly for significant statistical trends. X-rays will be reviewed by the investigators, who will work in panels, with each investigator prohibited from making interpretations on the films of patients from his group of patients. The results of the x-ray interpretations will be correlated with clinical data and each regimen will be evaluated monthly from a therapeutic point of view. As resistance data, which will be delayed by an average of 6 to 12 weeks, become available these will be correlated with clinical and x-ray data and each regimen will be evaluated in its total overall effectiveness as compared to each of the other regimens. The first five regimens will have a sufficient number of cases to expect significant data if there are differences in the various regimens, which is expected of course. The pilot groups at Battey will be watched carefully for results of therapeutic efficiency looking toward other approaches in treatment in case there is failure in the other regimens.

While the study is set up to cover 40 weeks of treatment and an additional 20 weeks of observation, one or more of the regimens may be dropped if monthly evaluations prove their ineffectiveness. In the same manner, any patient will be dropped from the study if drug intolerance develops or if complications develop which demand changes in regimens for the patient's welfare.

From this study we hope to find answers to the following fundamental questions: (1) How effective is the drug; (2) In what dosages is the drug most effective; (3) Is the drug more effective in daily or intermittent dosages; (4) Is the drug more effective when combined with streptomycin; (5) If clinical and laboratory resistance develops, when does it occur and what is its significance in relation to therapeutic efficiency; (6) Will the drug modify or prevent the need for major thoracic surgery which is now one of the major essentials in the treatment of pulmonary tuberculosis; (7) Will it be possible to significantly shorten the length of hospital stay for the average patient and, finally, (8) Can the drug be used as a preventive by rendering the patient with open lesions relatively noninfectious so that patients who cannot secure hospitalization, or will not avail themselves of hospital facilities, can safely be treated at home.

One important fact has already been discovered by the investigators. This is one Federal agency which is not dictatorial in its approach. Protocols were developed by the investigators without dictation or coercion in any form and "red tape" exists only insofar as the investigators themselves have insisted that each member of the team submit data that can be statistically tabulated and analyzed. While this is not the first study in which Battey has participated we continue to be amazed at the efficiency of this division in organizing and coordinating a study such as this which involves so many different institutions with their manifold problems. It represents the ultimate in the team work approach to one of our many medical and social problems and justifies the support of organized medicine and all public health agencies.

REFERENCES

1. American Review of Tuberculosis, April, 1952.
2. Diseases of the Chest, April, 1952.
3. Quarterly Bulletin, Seaview Hospital.

C. MARSHALL LEE, JR., M.D., Cincinnati, Ohio

INTESTINAL OBSTRUCTION

in the Newborn Infant

It is a fact, familiar to all, that the clinical manifestations of intestinal obstruction, from whatever cause, depend, in large measure, on such fundamental factors as the level at which the bowel is blocked and the completeness or incompleteness of the barrier. A third determining feature is the duration of the process and, as a corollary, the rapidity with which it has developed. The fourth vital consideration is the integrity of the blood supply in the affected area. Although these factors are all directly related to both symptoms and management, the actual cause of the obstruction is no less important. The diagnosis, and more particularly, the method of surgical treatment may often be predicated on the specific cause.

The present discussion is confined to the diagnosis and management of intestinal obstruction during the neonatal period, which includes, roughly, the first two weeks of extrauterine life, whether the infant is premature or has been born at term. Limitation of the review to this period is not arbitrary, but is derived from the fact that it embraces the various congenital obstructive conditions which, if not promptly corrected, are incompatible with survival. If a well-planned approach to the individual patient is to be possible, it is essential that the major etiological factors in intestinal obstruction of the newborn infant be reviewed and kept clearly in mind.

Common Causes of Intestinal Obstruction in the Newborn

1. *Atresia and Stenosis*

Prominent among the obstructing anomalies are the closely related phenomena of atresia and stenosis. By definition, the word stenosis means a narrowing or incomplete closure of a tubular structure or orifice, while atresia means complete occlusion or absence of any opening. Intestinal stenoses may consist of only a low-grade narrowing of the passage, which is not incompatible with life and may not be discovered for many years[4 7 16], but most of them are so narrow that, from the practical standpoint of survival, they are complete. Ladd and Gross[16] noted that half of their proven cases of stenosis were clinically indistinguishable from atresia. Both conditions apparently derive from the same embryological mechanism and differ only in the degree of occlusion of the bowel.

Congenital atresias and stenoses present themselves as narrow, ring-like or diaphragm-like constrictions, or they may affect a segment several inches (and, rarely, several feet) long. Occasionally they may be multiple, at more than one level. If the obstruction is of sufficient degree to prevent the passage of meconium in appreciable amounts, the bowel distal to the obstruction is collapsed, small and empty, though intrinsically normal. This circumstance is of very great diagnostic importance.

No part of the gastro-enteric tract is immune to the occurrence of atresia, and Evans[7] has estimated an incidence of one in every 1500 births. The estimate does not include anorectal anomalies which occur about once in 800 births. Evans reviewed 1498 cases of atresia, reported in the literature, and found that 76.2 per cent died without operation, usually during the first few days of life, and that only 139 cases had been treated successfully by operation. He points out that the high mortality, in view of the increasing effectiveness of modern pediatric surgery, is largely due to failure to recognize the condition. Evans has estimated that atresia of the bowel takes the lives of about 3,000 babies a year in the United States alone and of about 50,000 in the rest of the world.

From the Department of Surgery, of the College of Medicine, the University of Cincinnati and the Surgical Services of the Children's Hospital and the Cincinnati General Hospital.

Read before the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 12, 1952.

Accurate statistics as to anatomical location are few. If anorectal anomalies are excluded, approximately 60 per cent of atresias occur in the ileum and 6 per cent in the large bowel, while 34 per cent occur from the jejunum upwards—usually in the duodenum. As has been suggested earlier, the clinical symptoms and surgical management depend upon the level at which the lesion exists and will be considered later in the discussion.

The group of anomalies generally classified as imperforate anus should properly be mentioned along with atresia and stenosis since the various types actually represent the same phenomena occurring at the junction of the hindgut and the proctodeum. But their terminal position makes them readily accessible to the examining eye and finger and their developmental relationship with the genitourinary tract places them in a special category.

2. *Meconium Ileus*

One condition which is unavoidably confused with atresia is meconium ileus. It should not be confused with meconium peritonitis, which is a different entity. As the name implies, meconium ileus is an obstruction by meconium. The obstruction is always in the distal ileum and is the result of pancreatic and possibly hepatic insufficiency derived from so-called fibrocystic disease of these organs, occurring *in utero*. The cause of this degenerative change, which affects the pancreas primarily, but also the liver and tracheobronchial glands, is unknown. When it appears after birth the familiar coeliac syndrome develops[8]. Intestinal obstruction is not a feature of fibrocystic disease of the pancreas when it occurs postpartum. But when it affects the infant in utero the deficient external secretion of the pancreas, and disturbed biliary physiology, together with the absence of bacterial ferments in the foetal gut, results in improperly digested meconium. This, as it moves down the bowel, becomes thick and putty-like and in the lower ileum it is immovably impacted. When the disease is severe the obstruction of the ileum, at birth, is as complete as if atresia were present. Thus, the clinical manifestations of the two conditions may be almost identical, although the causes, and consequently the management, are completely different.

3. *Congenital Adhesions, Malrotation and Midgut Volvulus*

Another type of obstruction is the group associated with anomalies of rotation and fixation during the developmental growth of the intestinal tract. Detailed review of the mechanisms of rotation and fixation would be too large an undertaking for the present discussion. Those interested in further study of the subject are referred to the presentations of Dott[6], Andrews[2], Callander[5], Ladd and Gross[16], and more recently, Gardner[10]. For the present it should be enough to note that the primitive midgut, that is from the duodenum to the mid-transverse colon, elongates so rapidly during its early growth that most of it lies in the amniotic sac, outside the abdominal cavity. The first phase of rotation occurs here and if development is arrested at this point an omphalocele or amniotic hernia results. A very primitive state of malrotation or non-rotation is concomitantly present, but since obstruction is not the dominating feature of omphalocele it is mentioned only in passing.

Of particular significance, here, is failure of the second and third phases of intestinal rotation, resulting in malposition of the colon and malfixation of the primitive mesenteries to the parietal peritoneum. These rotational processes, when they progress normally, determine the position and attachments of the abdominal viscera. When they proceed abnormally, a wide variety of congenital adhesions are produced. These are most common in the region of the duodenum, in the course of its conversion from an intraperitoneal to a so-called retroperitoneal structure. Such adhesions are, of course, extrinsic obstructing mechanisms and, by themselves, are seldom sufficiently severe to be lethal during the neonatal period. But in the course of the same arrested development which produces them, the mesenteries of the small and large bowels are inadequately attached and volvulus of the entire midgut, around the superior mesenteric artery as an axis, may actually be present at birth or occur shortly afterwards. This is an intestinal obstruction of the first magnitude since it not only interrupts the fecal stream but jeopardizes the circulation of the affected bowel.

4. *Inflammatory Adhesions; Meconium Peritonitis*

Obstructing adhesions in the newborn are not always congenitally derived from malrotation. Intrauterine rupture or perforation of the bowel sometimes occurs with or without congenital obstruction. If it takes place several weeks or more before birth the actual perforation usually heals and cannot be demonstrated at operation or autopsy. But the escape of meconium produces a chemical or foreign body peritonitis with resulting adhesions or encapsulated fluid, which often give rise to a potentially lethal obstruction. These meconium adhesions frequently become calcified and can be demonstrated as radio-opaque shadows, of varying density, in a flat film of the abdomen.

Of course if rupture of the bowel occurs during or immediately after birth, when the gut contains swallowed air, bacteria and gas, the picture is different. Acute peritonitis, pneumo-peritoneum and extreme toxicity dominate the syndrome and this situation is not properly included among the mechanical obstructions of the immediate post-natal period.

5. *Parasympathetic Ganglion Deficiency; Congenital Aganglionic Megacolon*

Another obstruction-producing mechanism which is being recognized and successfully treated with increasing frequency is congenital absence or deficiency of the parasympathetic ganglia of Auerbach's and Meissner's plexuses. To use the term megacolon in the newborn infant is frequently inaccurate because actual megacolon may or may not be present.

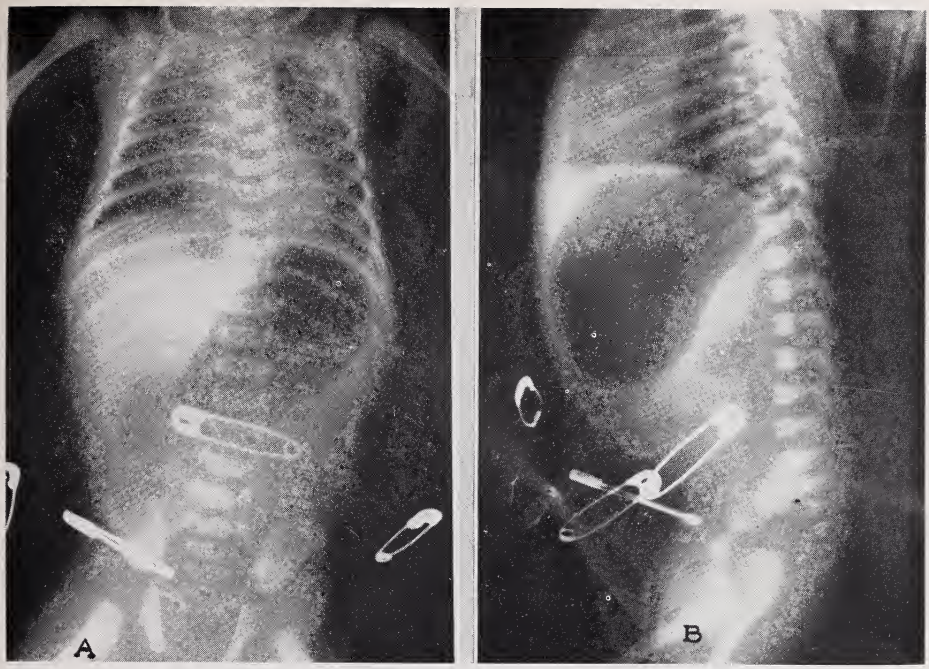


Fig. 1. Antero-posterior and lateral films in a case of duodenal atresia, first seen on the 3rd day of life. The stomach and duodenum are distended but no gas is seen anywhere else in the abdomen.

The enormous dilatation and hypertrophy of the colon, to which the term megacolon is applied, represents the physiological response to chronic incomplete obstruction of the large bowel and may be secondary to either congenital or acquired obstructions. It is only incidental to the situation here being considered. Whether from congenital agenesis or from some unrecognized intrauterine infection, (this point is obscure, though the first explanation is generally accepted), a considerable number of infants are born with a serious deficiency or complete absence of the parasympathetic ganglia in the myenteric plexus of Auerbach and the submucous plexus of Meissner, in some portion of the bowel[30]. Most commonly only a comparatively short segment of rectum and rectosigmoid is affected, but occasionally the entire large bowel or even a segment of small bowel may be involved. When these ganglia are absent the affected segment is incapable of conducting an orderly and effective peristaltic wave, with consecutive rings of contraction and relaxation. Under the stimulus of the sympathetic innervation, without the synchronized relaxations of its autonomic associate, the parasympathetic system, the aganglionic segment undergoes only a sort of mass contraction, useless as a propulsive force[12]. This achalasic, or unrelaxed segment appears normal to the naked eye, but it produces a potentially lethal functional obstruction. Since, in the vast majority of cases, the aganglionic area is in the rectum and lower sigmoid, where water absorption has made the bowel contents thicker and less fluid, the need for effective peristaltic action is especially great. Signs of low intestinal obstruction are quickly apparent and if unrelieved the obstruction is rapidly fatal. If partially and ineffectively relieved, the congenital type of megacolon will soon result if it is not already present at birth.

6. *Inguinal Hernia*

Consideration of intestinal obstruction in the neonatal period would be incomplete without mention of hernia. Omphalocele, (or amniotic hernia), has already been touched upon briefly. So-called congenital internal hernias, such as paraduodenal hernia are also actually manifestations of malrotation[2,10]. Congenital diaphragmatic hernia should also be mentioned but since it entails much more than intestinal obstruction alone it does not merit extended discussion here. What is of more immediate concern is the familiar inguinal hernia, which may be overlooked with embarrassing ease as a cause of obstruction in the neonatal period. The examination of the young infant with intestinal obstruction must include a careful search for incarcerated inguinal hernia. We



Fig. 2. Photographs of the infant whose films are shown in Figure 1. The infant weighed 4 lbs. 2 oz. The photograph A was taken immediately after operation. Photograph B shows the infant at the age of 5½ months.

have seen it detected for the first time, to the chagrin of the initial examiner, by an alert radiologist looking at a film of the abdomen which, in these small infants, always includes the pelvis and upper femoral regions. Sometimes, even when hernia is recognized, it may be difficult to say with conviction whether it is the source of the obstruction. Only when it is obviously strangulated can one be reasonably certain that some coexisting intra-abdominal anomaly is not present and actually producing the obstruction.

It has doubtless been noticed that reduplication of the bowel (enterogenous cyst), hypertrophic pyloric stenosis, and intussusception have not been discussed. All three of these conditions, especially the two latter, are common as causes of obstruction in childhood. However, they manifest themselves during the first two weeks of life with such rarity that any one of them, productive of symptoms during the neonatal period, would be extremely unusual.

Clinical Diagnosis

The several more common causes of intestinal obstruction in the period immediately after birth must be kept constantly in mind by the physician or surgeon who cares for such patients. By means of a careful history, meticulous examination and certain technical aids a fairly accurate diagnosis can be made. In many ways the characteristics of mechanical obstruction at this early age differ considerably from what are accepted as useful diagnostic signs in older patients. Some of these differences are advantageous, while others make the diagnosis more difficult. The surgeon accustomed to dealing with intestinal obstruction in older and more articulate patients usually thinks in terms of (1) colicky paroxysmal pain, (2) vomiting (early or late depending on the level of obstruction, and often "fecal"), (3) hyperactive peristalsis with a high-pitched tinkling quality, and (4) as frequent later developments, abdominal distention and cessation of bowel movements.

The single symptom common to every type of obstruction in young infants is vomiting. The character of the vomiting and the appearance of the vomitus are of great importance. Regurgitation of small amounts of recently ingested formula or breast milk by a contented infant is, of course, of no significance. The forceful vomiting of large amounts of gastric contents without the yellow color of bile is characteristic of hypertrophic pyloric stenosis but this seldom becomes evident in the first two weeks of life. Significant vomiting in the newborn infant contains bile almost from the outset except in atresia of the esophagus, or in the rare co-existence of congenital biliary tract atresia. The vomitus, in obstructions below the level of the third portion of the duodenum, rapidly becomes "fecal" or meconium-like in character. It is usually out of all proportion to the amount of ingested fluids. It is persistent and frequent and the infant is disinclined to nurse.

The character and quality of peristaltic sounds, on auscultation of the abdomen, is relatively valueless in the newborn infant in comparison with the extreme importance of this diagnostic aid in older patients. Those interested in the physiological basis for many of the statements here included are referred to the chapter on the digestive tract in Clement Smith's admirable monograph[26]. For the present it is well to remember that an orderly and regular pattern of peristaltic activity may not be established for several weeks or even months. This may be metaphorically ascribed to "lack of practice" and to certain normal deficiencies in the muscular layers of the stomach and intestines. In obstruction of the newborn distention occurs early, and the stomach is notably capable of phenomenal inflation, with swallowed air and ingested fluids. Even after careful auscultation and percussion it may be difficult to distinguish between distention of the stomach alone and general intestinal inflation. Sometimes the presence of characteristic waves of visible peristalsis from left to right may help to make the distinction.

Certain steps in the physical examination are so obvious that their very simplicity may lead to oversight. A search for externally demonstrable herniae has already been mentioned but is worth re-emphasis. Indirect inguinal hernia is, of course, the type most commonly associated with incarceration and obstruction. Imperforate anus is also easily demonstrable (Figure 3). The presence of the more common types of anorectal anomalies, Type II and Type III, are evident on even a cursory examination and the rarer Types I and IV can be ruled out by digital or anoscopic examination. In these small infants we have found an ordinary bivalved nasal speculum and headmirror the most practical instruments for visualization of the anal canal.

The passage, or lack of it, of normal meconium is manifestly very significant. It is essential that the medical examiner confirm the passage of normal meconium by personal observation. The history is notoriously unreliable. There is an entirely human tendency in the harried student nurse, preoccupied with her many duties in a well-filled "newborn nursery" to record the passage of "normal meconium stool" in a sort of occupational form of "automatic writing". Five such notations were counted in the record of one of our cases when atresia of the transverse colon was present and the descending large bowel was empty, save for the mucus and cellular detritus which constitute so-called "white meconium". When white meconium is seen, the burden of proof rests on him who would say that complete obstruction somewhere in the intestinal tract does *not* exist.

Refinements of this observation have been proposed, on the basis of the composition of meconium. As Smith points out, meconial characteristics normally disappear from the fecal mass by about the fourth day. But in the newborn infant certain constituents of meconium can only be present if the intestinal tract is patent. These are cornified epithelial cells from the skin, and lanugo hair which are swallowed with the amniotic fluid. Both are of a nature to resist digestion and may be found relatively intact in a properly selected and suitably prepared stained smear. Farber[9], and possibly Jacobi[15] before

him, utilized this fact to confirm the presence of complete obstruction. Farber's test, as it is generally called, has, in our hands, been found to have only limited usefulness. It is so easy to contaminate the specimen with cells or lanugo from the buttocks that the significance of the cells, when found, is always open to question. Furthermore, stenosis of sufficient degree to be lethal may still permit the passage of cells and lanugo from above.

Radiographic Diagnosis

With respect to radiographic examination Doctor Smith may well be quoted again:

"It is of interest that air begins to accumulate in the stomach surprisingly soon after the normal infant's birth, so that films taken within five minutes often show a gastric bubble. This usually has been passed well along into the ileum within the first two hours of life and a considerable amount is in the colon at three hours; so quickly and so regularly does this occur that evidences of interference with the passage of air are of much usefulness in the diagnosis of obstructive conditions in newborn infants."

There are few situations where the radiographic examination is of more paramount importance than in the differential diagnosis of intestinal obstruction in the newborn. Three-positional films, that is, anteroposterior projections in the supine and upright positions and a lateral projection in the erect position, frequently provide all the special information that is necessary. Such exposures, in these small patients, almost necessarily include all or most of the chest, and extend well below the pelvis. Even the eye of the surgeon learns much from such films, through interpretation of gas or air patterns. If he is blessed, as we are, by the support of alert radiologists, the information provided is often definitive.

If the stomach is distended, and especially when air is seen in the duodenum, while the rest of the abdomen is innocent of radioluscent bubbles (Figure 1), in an infant more than four hours old, then little more is needed to support the clinical evidence of duodenal obstruction. This will commonly be due to atresia, high grade stenosis, or midgut volvulus. Gross and Chisholm[11] have reported a case in which such obstruction was due to an annular pancreas. At any rate, the surgeon's duty is clear. If the small bowel is filled with air and the large bowel is not, the significance is at once apparent. The distinction between air in the small bowel and in the large bowel is not always easy to make but frequently the pattern is very clear. Again atresia or stenosis comes to mind, and may be at any level from duodenum to ileum. If the level of obstruction is deduced to be in the lower ileum, then the cause may be either atresia or meconium ileus, and the surgeon must be prepared to deal with either eventuality. If calcareous opacities are seen, then meconium peritonitis of remote origin should be correctly inferred and the obstructing adhesion or adhesions may be found at any level.

When the entire intestinal tract, the large bowel included, is distended with gas, the obstruction is obviously low. Atresia of the colon, though relatively rare, must of course be considered. By virtue of the ileocaecal valve, large bowel obstruction always partakes of the nature of "closed loop" obstruction. Distention may be enormous, and compression of intrinsic vessels in the bowel wall by the pressure of this extreme inflation may render the circulation so sluggish that local ischemia combined with the pure physical force of the expanding air may result in rupture. Pneumo-peritoneum, demonstrated in the film, combined with the clinical evidence of acute peritonitis makes the diagnosis of ruptured bowel unequivocal. While bowel rupture in the newborn infant may occur in the absence of obstruction, this is unusual, and when rupture is demonstrated, obstruction must always be presumed to be present until it has been conclusively ruled out at operation[22].

Most of the time the plain films above described are adequate for a satisfactory diagnosis. In some situations special techniques and contrast media are necessary. As a general rule barium by mouth is to be avoided both because of the risk of vomiting and aspiration and because, if the barium is retained, there is danger of impaction at the level of obstruction. At times, when adequate radiographic information about the upper gastro-enteric tract cannot be obtained in any other way, a naso-gastric tube is first introduced and then small amounts of thin barium are given through it. The contrast studies are completed as quickly as possible and then the barium is removed by suction.

Barium enema is generally safe and often highly informative. If the colon is normal in size for a newborn infant one can be certain that complete obstruction does not exist. When complete congenital obstruction is present the bowel distal to the colon is small, empty and collapsed, having never had the stimulus of meconium content to make it attain normal size. The barium enema will then demonstrate a "microcolon". Many infant lives have been lost because of the belief that microcolon is a primary congenital anomaly not amenable to surgical correction. There is abundant evidence to indicate that microcolon is simply the result of non-filling, below a complete obstruction[7 21]. The pencil-sized colon is intrinsically normal if a fecal stream can be brought to it, and demonstration of microcolon is prima facie evidence of complete obstruction. It is not necessary for the barium to reach the level of obstruction from below. The impressively small size of the colon is evidence enough and the demonstration at surgery of either meconium ileus or atresia of the bowel may be predicted with confidence.

Another special technique much better known and more widely employed is that used to demonstrate the length of the blind segment in imperforate anus. This is the use of anteroposterior and lateral plain films in the inverted position[28]. In our experience the method is not so exact as it was once supposed to be. Incorrect interpretation may often result from taking the film too early. When imperforate anus has been demonstrated at the initial physical examination it is well to permit some six to ten hours to elapse before

the films are made. This allows a moderate distention to develop, and since the obstruction is so low, will do the infant no harm. Then a lead marker such as a BB shot is fixed to the anal dimple with adhesive tape. The infant is then held, feet up, in the position commonly used at delivery, for two or three minutes, to allow the gas to rise as high in the blind rectum as possible. The radiographic exposures are made, and the distance between the air-filled blind rectum and the lead marker will offer a fairly accurate estimate of the thickness of the septum. Even with proper timing and expert technique, the radiographic interpretation is not always accurate. In Type III, where the blind end of the rectum is well separated from the anal skin, the common association of fistulae may confuse the picture. But the test is of definite value in so many cases that we routinely use it, the diagnostic conclusion being modified and adjusted by carefully evaluated clinical findings.

This balance between radiographic and clinical findings is especially important in the diagnosis of parasympathetic ganglion deficiency. Actual megacolon may not be and usually is not demonstrated during the first few days of life. The signs of low obstruction are unmistakeable, with massive distention, vomiting, and obstipation. Proctoscopic examination and barium enema may both be negative, and serve to exclude other causes of obstruction. The characteristic fact is that the infant is obviously obstructed but no apparent cause for the obstruction can be found. Moreover, the obstruction *is relieved by enema*, if enough fluid is introduced high enough. If a day passes without an enema, signs of obstruction promptly recur, but relief by high enema is again immediate. In this situation the diagnosis of ganglion deficiency and potential megacolon can be made with conviction[19 20]. In the very rare instances when the ganglion deficiency affects all of the large bowel or segments of small bowel, the enema will not afford relief and the three cases of this kind, that we have seen, have all terminated fatally.

Management of Obstruction in the Newborn

General Measures

The existence of intestinal obstruction in the newborn infant is easily recognized, but the differential diagnosis as to cause and location may require careful study, as the foregoing remarks have suggested. The time required for such clinical study of the individual case should be as short as possible, but never so hasty as to engender carelessness of observation or interpretation. Complete obstruction, from the jejunum down, is frequently complicated by volvulus, or extreme distention. Impairment of either the extrinsic or the intrinsic circulation of the bowel may result in either gangrene, or perforation, or both. Obstructions from atresia of the duodenum are seldom thus complicated, for three reasons. First, the fixed position of the duodenum and stomach render them almost incapable of volvulus, in the ordinary sense. Second, both of these structures are relatively resilient and expansile and can withstand proportionately greater degrees of distention. Finally, increasing distention of these upper viscuses regularly results in periodic partial or complete decompression by vomiting.

During the interval of pre-operative study, careful attention must be paid to the general condition of the infant, and especially to disturbances of fluid and electrolye balance. Base-line blood chemistry studies should be obtained promptly and replacement therapy should be started at once. Canalization of the long saphenous vein at the ankle, with a small polyethylene tube[1], is the most dependable method of introducing and maintaining the flow of corrective fluids. Continuous suction through a naso-gastric tube serves the triple purpose of preventing further vomiting and possible aspiration, improving respiration by relieving pressure on the diaphragm, and eliminating the troublesome interference of a distended stomach when laparotomy is done.

Oxygen by inhalation is nearly always a needed adjunct to the general supportive measures. In this connection another passage from Smith's monograph is pertinent:

"Intra-uterine life is distinguished by a qualitatively unique form of hemoglobin, and by a deficiency in the carbonic anhydrase content of the erythrocytes. These features begin to undergo alteration at or soon after birth. However, since the alterations require time, the infant retains these fetal characteristics to some extent during the neonatal period. . . . It is apparent that, while the characteristics of fetal hemoglobin would to some degree assist respiratory processes after birth, the deficit in carbonic anhydrase would, if anything, be detrimental."

The deficiency of carbonic anhydrase, an enzyme which favors the release of carbon dioxide from the lungs, coupled with the mechanical impairment of respiration induced by abdominal distention, constitute valid reasons for the use of supplemental oxygen, before, during, and after operation.

Still another general consideration is conservation of body heat. Valuable as this is in the acutely ill full-term infant, it may assume critical importance in the premature baby. "Incubators" are available for housing the infant in the nursery, but temperature control in the operating room has not received sufficient attention. We prefer to use a specially constructed table[23], the temperature of which may be adjusted up or down by circulating water through a system of built-in coils. Additional precision in this control is achieved by means of a rectal thermometer, an electric thermocouple[3], which continuously registers the infant's temperature on an instrument resting on the anesthetist's stand.

Meticulous attention to all of the foregoing supportive measures has contributed as much or more to the success of operations on newborn infants as have technical advances in operative procedures.

Surgical Corrective Procedures

The detailed technique of the various surgical procedures employed are not pertinent to the present discussion, and only a few generalizations should be adequate to indicate the importance of accurate diag-

nosis in its relationship to surgical correction.

In atresia of the duodenum, resection of the obstructed segment with primary anastomosis is not feasible because of the intimate anatomical relationships of the pancreas, the biliary tract and the superior mesenteric artery. Gastrojejunostomy is technically easy as a by-passing procedure and has been employed, but it is often unsatisfactory. The dilution of the acid gastric contents by the alkaline duodenal and biliary secretions is poorly tolerated and so frequently results in anemia and malnutrition that the anastomosis must often be taken down at a later operation, and duodeno-jejunosotomy done[17]. It is, therefore, highly desirable to perform a duodeno-jejunostomy initially and we prefer a retrocolic anastomosis (Figure 2).

When duodenal obstruction is due to midgut volvulus, the volvulus is of course untwisted and the definitive corrective procedure, known as Ladd's operation[18] is then performed. This consists of meticulously dividing all of the congenital bands present, allowing the duodenum and jejunum to hang straight down the right side of the abdomen, and placing the large bowel on the left side. Ladd has shown that this seemingly paradoxical approach is much more effective and less likely to be attended by recurrence than is the always ineffective attempt to reproduce the normal anatomical arrangement of the bowel.

When atresia occurs anywhere from the jejunum to the sigmoid reflection, resection and primary anastomosis is the operation of choice. But in the presence of meconium ileus resection is obviously useless since a new impaction inevitably occurs. For this reason, meconium ileus was, until four years ago, regarded as 100 per cent fatal. In 1948 Hiatt[14] described the technique of flushing out the impacted meconium with saline, or 5 per cent pancreatin solution, or both, through a rubber tube ileotomy, which is immediately closed. Pancreatin solution is administered through a naso-gastric tube postoperatively, and later added to the formula. An increasing number of survivals are now being achieved with Hiatt's operation. The ultimate prognosis in meconium ileus is obviously not as good as it is in cases of atresia, since the underlying fibrocystic disease is still present and nutritional and pulmonary complications are exceedingly troublesome. Nevertheless, a significant number of these infants can go on to reasonably normal growth and development under careful medical management, if they can be made to survive the neonatal obstruction by prompt and properly executed surgery.

The relief of obstruction from meconium peritonitis consists of lysis of the adhesions which, since they are frequently calcified, may be a tedious and exacting process. Frequently the pre-existing perforation is secondary to congenital obstruction such as atresia and this, if present, must, of course, be corrected at the same time.

In obstructions due to parasympathetic ganglion deficiency, immediate surgery may not be necessary provided the condition is recognized and decompression can be regularly and effectively provided by daily high enemas. If the achalasic segment is too long to permit this, we would not hesitate to perform Swenson's[27] or Hiatt's[13] "pull-through" operations even in very young infants. Both operations are designed to resect the aganglionic terminal segment and restore continuity and perserve sphincter control by means of a para-anal anastomosis just above the sphincter. To date we have not had to do this in the newborn and have been able to carry the infant until he is several months old before the operation is done. We have performed it without difficulty and with excellent result at the age of eight months, and many times between this age and two years.

Little needs to be said regarding inguinal hernia, beyond the importance of recognizing it as a factor in neonatal intestinal obstruction. The simple operation described by Potts[25] is easily and safely done at any age, and the long term results are very satisfactory.

The correction of Type II imperforate anus is a simple procedure but in Type III much more of a problem is presented. The wide mass of tissue separating the blind rectum from the anus and the frequent presence of associated fistulae (Figure 3) demand considerable surgical ingenuity. Frequently the blind bowel can be pulled down from below, but the presence of a fistula often makes an abdominal colostomy imperative. We are reluctant to employ an enterostomy of any kind in the newborn infant because (especially in small bowel enterostomy) the loss of fluids and electrolytes is very difficult to control and the soiling and excoriation of the skin constitute a difficult nursing problem and an added hazard in subsequent operations. The one stage abdomino-perineal operation described by Norris[24] in 1949 has been very rewarding in our hands. The fistula, if present, is closed at the same time, and no colostomy is needed. The infants withstand this major operation with surprising ease and the results as estimated by follow-ups up to three and a half years are satisfactory.

The aspect of the management of imperforate anus which requires special emphasis here is that of postoperative dilatations. Regardless of what type of imperforate anus is present or what operation is used to correct it, follow-up dilatations must be continued for several years, frequently until the child is four or five years old. In a high percentage of cases cicatricial stenosis develops, and if this is not prevented or corrected severe megacolon may result. Many of the worst cases of megacolon that we have seen[20] have been in children who have been operated upon for imperforate anus but have not had adequate follow-up care. As soon as the operation has healed, graded dilatations should be done at regular intervals. While the infant is small, Hegar's cervical dilators are used. As the size of the anus increases digital dilatations may be employed and the mother may be instructed in the technique of administering them at home. Ultimately the child graduates to the use of Young's hard rubber or bakelite anal dilators. If these dilatations are properly performed or supervised no interference with sphincter control should result and crippling stricture can be avoided. In some infants with

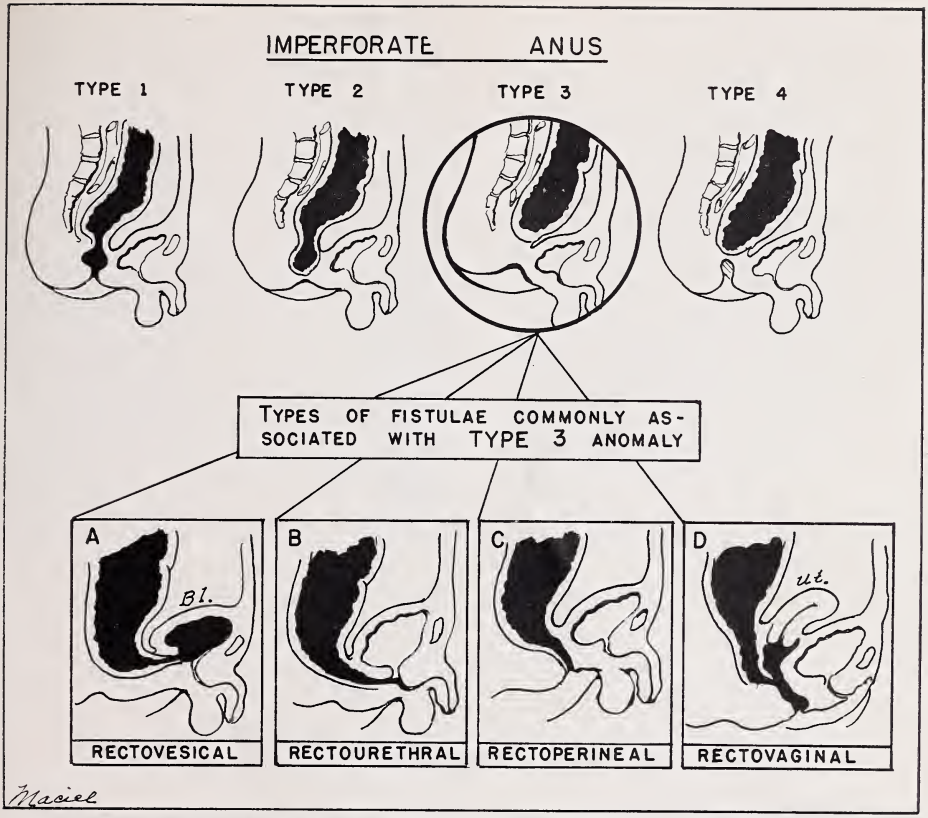


Fig. 3. In this line drawing the four major types of ano-rectal anomalies (classification of Ladd and Gross) are shown. The several types of fistula commonly associated with Type III imperforate anus are also illustrated.

Type III imperforate anus the sphincter is congenitally deficient and the child must acquire control through the levator ani muscles, but in such cases the dilatations are not responsible for the sphincter weakness. Some degree of narrowing may be helpful in establishing control, but close supervision must be exercised to prevent it from becoming severe enough to produce chronic obstruction and megacolon.

Summary and Conclusions

The accurate diagnosis and effective management of intestinal obstruction in the newborn infant is a phase of pediatric surgery which has made tremendous progress, especially during the past eight or ten years. Until then the majority of the conditions here reviewed were rightly regarded as hopeless either from the standpoint of survival or from that of providing the unfortunate infant with a chance of normal growth and development and a physically unrestricted life.

It is the duty of every physician who deals with young infants, whether he is a general practitioner, obstetrician, pediatrician, surgeon or radiologist, to be familiar with the advances in this field. Cooperative effort, especially between the last three categories named, can salvage literally thousands of these infants who, until relatively recently, had little or no chance to survive. The present essay has sought to systematize and summarize the current methods of diagnosis and management of these conditions, and to indicate the importance of accurate diagnosis with respect to the procedures now available for their correction.

References

1. Alexander, E.; Small, W., and Campbell, J. V.: A Dependable Method for Constant Intravenous Therapy in Infants Using Polyethylene Tubing, Ann. Surg. 127:1212-1216, 1948.
2. Andrews, E.: Duodenal Hernia—A Misnomer, Surg. Gynec. & Obst. 37:740-750, 1923.
3. Bigler, J. A., and McQuiston, W. O.: Body Temperature

During Anesthesia in Infants and Children, J.A.M.A. 146: 551-556, 1951.
4. Boland, F. K.: In discussion of a paper by Dr. Wm. E. Ladd, J.A.M.A. 101:1548, 1933.
5. Callander, C. L.: Surgical Anatomy, ed. 1, Philadelphia, W. B. Saunders Company, 1933.
6. Dott, N. M.: Anomalies of Intestinal Rotation: Their Embryological and Surgical Aspects, with Report of Five Cases, Brit. J. Surg. 11:251-286, 1923.
7. Evans, C. H.: Atresias of the Gastrointestinal Tract, Internat. Abst. Surg. 92:1-8, 1951.
8. Farber, S.: Relation of Pancreatic Achylia to Meconium Ileus, J. Pediat. 24:387-392 (April) 1944.
9. Farber, S.: Congenital Atresia of the Alimentary Tract. The Diagnosis by Microscopic Examination of Meconium, J. A. M. A. 100:1753-1754, 1933.
10. Gardner, C. E.: The Surgical Significance of Anomalies of Intestinal Rotation, Ann. Surg. 131:879-898, 1950.
11. Gross, R. E., and Chisholm, T. C.: Annular Pancreas Producing Duodenal Obstruction. Report of a Successfully Treated Case, Ann. Surg. 119:759-769, 1944.
12. Hiatt, R. B.: The Pathologic Physiology of Congenital Megacolon, Ann. Surg. 133:313-320, 1951.
13. Hiatt, R. B.: The Surgical Treatment of Congenital Megacolon, Ann. Surg. 133:321-329, 1951.
14. Hiatt, R. B., and Wilson, P. E.: Celiac Syndrome. VII. Therapy of Meconium Ileus; Report of Eight Cases with A Review of the Literature, Surg., Gynec. & Obst. 87:317-327, 1948.
15. Jacobi, A.: Defective Development of the Intestine, New York, The Am. Med. Monthly, 16:30-32, 1861.
16. Ladd, W. E., and Gross, R. E.: Abdominal Surgery of Infancy and Childhood, Philadelphia, The W. B. Saunders Company, 1941.
17. Ladd, W. E.: Congenital Duodenal Obstruction; Surgery, 1:878-885, 1937.
18. Ladd, W. E.: Congenital Obstruction of the Duodenum in Children; New England J. Med. 206:277-283, 1932.
19. Lee, C. Marshall, Jr.; Bebb, Kenneth C., and Brown, John R.: The Selective Management of Megacolon in Infants and Children, Surg., Gynec. & Obst., 91:281-295, 1950.
20. Lee, C. Marshall, Jr., and Bebb, Kenneth C.: The Pathogenesis and Clinical Management of Megacolon with Emphasis on the Fallacy of the Term "Idiopathic"; Surgery, 30:1026-1048, 1951.
21. Lee, C. Marshall, Jr., and MacMillan, Bruce G.: The Fallacy in the Diagnosis of Microcolon in the Newborn, Radiology, 55:807-813, 1950.
22. Lee, C. Marshall, Jr., and MacMillan, Bruce G.: Rupture of the Bowel in the Newborn Infant; Surgery; 28:48-66, 1950.
23. Lee, C. Marshall, Jr.: An Operating Table for Young Infants, Ann. Surg., 134:1066-1069, 1951.
24. Norris, W. J.; Brophy, T. W., and Brayton, D.: Imperforate Anus. A Case Series and Preliminary Report on the One Stage Abdomino-perineal Operation, Surg., Gynec. & Obst. 88:623-634, 1949.
25. Potts, W. J.; Riker, Wm. L., and Lewis, J. E.: The Treatment of Inguinal Hernia in Infants and Children; Ann. Surg. 132:566-576, 1950.
26. Smith, Clement A.: Physiology of the Newborn Infant, ed. 2, Springfield, Charles C Thomas, Publisher, 1951.
27. Swenson, O., and Bill, A. H., Jr.: Resection of Rectum and Rectosigmoid with Preservation of the Sphincter for Benign Spastic Lesions Producing Megacolon, Surgery, 24:212-220, 1948.
28. Wangensteen, O. H., and Rice, C. O.: Imperforate Anus —A Method of Determining the Surgical Approach, Ann. Surg. 92:77-81, 1930.
29. Webb, C. H., and Wangensteen, O. H.: Congenital Intestinal Atresia, Am. J. Dis. Child. 41:262-284, 1931.
30. Zuelzer, W. W., and Wilson, J. L.: Functional Intestinal Obstruction on a Congenital and Neurogenic Basis in Infancy, Am. J. Dis. Child. 75:40-64, 1948.

ROBERT G. ELLISON, M.D., and *JAMES L. ALEXANDER, M.D.*,
Augusta

Problems in the Diagnosis of

BRONCHOGENIC CARCINOMA

Both the incidence and mortality of bronchogenic carcinoma have risen sharply in the last few decades[9], therefore, it is of vital importance that this disease, often insidious in onset and with such diverse manifestations, be suspected and the diagnosis made while the disease is in its early stages.

This disease most commonly occurs in the fifth and sixth decades but it is known that it can occur in any age period[3 9 10]. Since it is more common in the older age group, however, bronchogenic carcinoma must be eliminated in any patient above thirty-five years of age with pulmonary symptoms. These symptoms depend upon such factors as the location of the primary lesion, the degree of bronchial obstruction, the presence of secondary infection, the extent of invasion of adjacent organs, and the presence of distant metastases[1 6 7 8 12].

Cough is the symptom most commonly encountered. A cough that seems out of proportion to the amount of existing pulmonary infection, persists after an acute infection has subsided and responds slowly to therapy, should be regarded with great suspicion. A chronic cough that changes in character or that persists after cessation of smoking may, too, be on the basis of an underlying bronchogenic carcinoma[9].

The next most common symptom encountered is

From the Department of Thoracic Surgery, Medical College of Georgia, Augusta.

Read before the Section on Thoracic Diseases at the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 14, 1952.

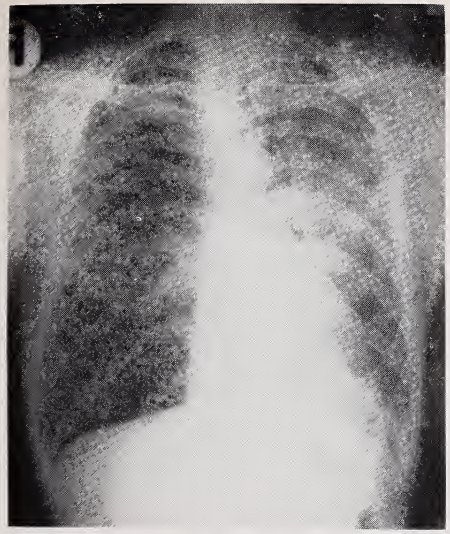


Fig. 1A. Case 1. Postero-anterior view of chest, showing infiltration in left upper lung field, upward retraction of the left hilum, and cystic appearance of the left base.

wheeze. The onset of asthma in middle age should always be regarded with suspicion and this diagnosis should be made very carefully. The wheeze of asthma or asthmatic bronchitis is usually expiratory in type and there is frequently evidence of emphysema associated with it. This wheeze, too, is usually heard bilaterally and, as a rule, is relieved by bronchodilator drugs. The wheeze of bronchial obstruction due to carcinoma, on the other hand, is inspiratory, localized, and usually unilateral[1]. Sometimes this wheeze is heard bilaterally, but if one observes carefully, it can be noted that the bilateral nature is due to transmission from the other side. Wheeze of any type is due to partial bronchial obstruction and in the absence of evidence of asthma or an asthmatic type bronchitis, underlying bronchogenic carcinoma should be suspected. It is easy to overlook this disease when a wheeze improves after administration of antibiotics and bronchodilators. Occasionally, the wheeze can be heard only when the patient is recumbent, and it is important not to overlook this portion of the auscultatory examination of the chest. A wheeze heard with the patient recumbent, and not heard with the patient erect, is almost pathognomonic of neoplastic bronchial obstruction.

Hemoptysis occurs frequently[1 2 5 6]. Often a patient is seen in advanced stages of carcinoma and gives the story that some months prior, at the time of onset of his blood spitting, he was reassured by his physician that his hemoptysis was due to rupture of a little blood vessel in his throat and there was no cause for concern. Hemoptysis is always serious and calls for thorough investigation. In the age group we are considering, it implies underlying bronchogenic carcinoma until this diagnosis has been eliminated.

REPORT OF CASES

Case 1. This 48 year colored male was admitted to University Hospital Dec. 3, 1951 because of dyspnea, cough and hemoptysis. In December 1947 he had a brief episode of lower left chest pain. This lasted about forty-eight hours, during which he had no medical attention. He finally consulted a physician, was given a single injection for relief of pain which disappeared and has not recurred. He was quite well until December 1950 at which time he noted the gradual onset of exertional dyspnea. At about this same time he began to cough and developed streaking hemoptysis. These same symptoms had been persistently present until the time of his admission to the hospital but had shown only slight progression. He complained of no pain at the time of admission. He denied any symptoms of orthopnea, palpitation, or swelling of the abdomen.

Physical examination on admission showed a well developed, fairly well nourished, colored male who appeared somewhat younger than his stated 48 years of age. Temperature 99 F., pulse 88, respirations 22. The head was of normal contour and examination of the eyes, ears, nose and throat revealed no abnormal findings. The neck was supple. No masses or tender areas were made out. There was no cervical lymphadenopathy.

The thorax was symmetrical and expansion was bilaterally equal and adequate. Percussion note was normally resonant except in the left base where it was somewhat impaired. Auscultation showed the breath sounds to be somewhat distant on both sides but of equal quality. There were transient, moist rhonchi on the left and a transient wheeze on the right. Both of these findings cleared on coughing. The cardiac size, shape, position, rate and rhythm were within normal limits. Blood pressure was 120/80.

X-ray examination of the chest (Figs. 1A and B) showed diffuse infiltration involving particularly the upper two-thirds of the left chest. It was impossible to determine definitely whether this was parenchymal or pleural involvement, however, one received the impression that a great deal of the involvement was pleural. The left hilus was quite elevated. In the left base were shadows which had the appearance of loculated fluid.

Bronchoscopic examination shortly after admission revealed



Fig. 1B. Case 1. Left lateral view of chest, showing suggestive mass in left hilum and cystic appearance of left base.

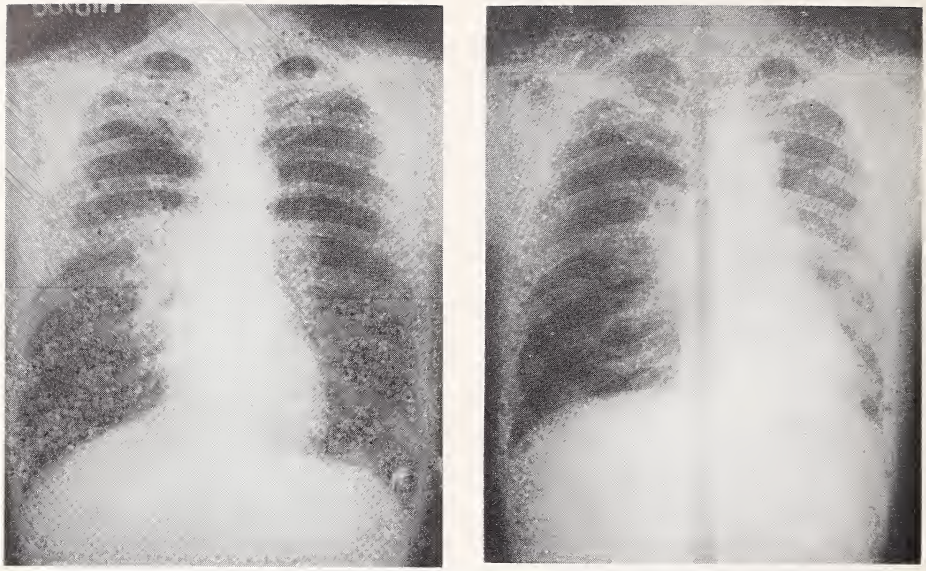


Fig. 2A, 2B. Case 2. Inspiratory and expiratory films demonstrating obstructive emphysema on the right, with a mass involving the right hilum.

upward and lateral retraction of the left main bronchus at the level of the left upper lobe bronchus. The left upper lobe orifice could not be adequately visualized. The mucosa surrounding the left upper lobe was not grossly abnormal; however, it did bleed quite easily upon contact. A biopsy was taken from the left upper lobe carina and bronchial washings were also taken from the left side.

Bronchography confirmed the impression of the upward retraction of the left hilum with considerable distortion of the left bronchial tree because of this retraction; however, no evidence of true endobronchial pathology was seen and no bronchial obstruction was noted as all bronchopulmonary segments filled.

Histopathologic examination of the bronchial washings and biopsy specimen showed squamous cell carcinoma in one of the three biopsies of bronchial mucosa. While much of the neoplasma was confined to the surface, there was evidence of invasion.

On Dec. 21, 1951 an exploratory thoracotomy revealed partial obliteration of the left thoracic cavity by quite dense, old, vascular adhesions. The left upper lobe was completely atelectatic and was densely adherent in the apex. At approximately the junction of the left upper lobe bronchus with the left main bronchus, a lobulated, firm mass measuring about 2.5 cm. in diameter in its greatest extent, was palpable. The aortic chain of nodes was quite enlarged, the largest of the nodes measuring 2 cm. in diameter. These nodes, however, were quite freely movable and showed no fixation either to each other or to the surrounding tissue. None of these nodes showed gross evidence of tumor invasion. A left pneumonectomy with mediastinal node dissection was carried out without particular difficulty.

The pathologist's report of the removed specimen follows: "Squamous cell bronchogenic carcinoma arising from the main bronchus of the left upper lobe forming an invasive neoplasm some 2 cm. in diameter and extending along the upper lobe bronchus a distance of 3.5 cm. with pronounced constriction of the lumen. The invasive neoplasm arises 2 cm. from the line of excision of the main bronchus. However, a pre-invasive border extends almost to the line of excision. The neoplasm directly involves a hilar lymph node. Hyperplastic lymphadenitis of the five detached lymph nodes.

His postoperative course was completely without event and he was discharged from the hospital on Jan. 2, 1952.

Comment: This patient had been spitting blood for twelve



Fig. 2C. Case 2. Lateral view demonstrating the mass in the right hilus.

months before the cause of the hemoptysis was established. Involvement of lymph nodes by cancer leaves him a very poor prognosis. Earlier clarification of the etiology of the hemoptysis would have increased his chances of being cured.

Dyspnea occurs not as commonly as the previously discussed symptoms but is seen not infrequently[1 3], especially in association with obstructive emphysema. Overdistention of one lung may cause displacement of the mediastinum to the contralateral side. In these cases dyspnea is the result of mediastinal displacement and compression of the contralateral lung. Dyspnea is also sometimes due to extension of cancer proximally to the bifurcation of the trachea with development of partial obstruction of both main stem bronchi. Dyspnea, too, occurs in association with pleural effusion secondary to bronchogenic carcinoma. These cases are advanced and, of course, inoperable. Dyspnea frequently is out of proportion to the amount of disease noted radiologically[3], this probably being due to an interference with the mechanics of respiration.

Pain is commonly associated with bronchogenic carcinoma. It may range in degree from vague, pleuritic pain associated with infection or atelectasis distal to the tumor, to the severe, intractable pain of chest wall or brachial plexus involvement[1 3].

Obstructive emphysema, seen as an area of increased radiolucency, localized to a segment, lobe or lung, depending on the site of obstruction, was in the past thought to be prima facie evidence of bronchogenic carcinoma. It is now felt that, in the absence of severe bronchial symptoms, such as wheeze or cough, such obstruction is usually not due to carcinoma. This sign does, however, point to endobronchial pathology, and when seen, demands that carcinoma be ruled out[2 5 11 13].

Case 2. This 33 year white male was admitted to University Hospital July 9, 1947 because of productive cough. About one year before admission he developed a cough which was at first non-productive but which gradually became productive until at the time of admission he raised about one-half cup of pus daily. In September 1946 a chest x-ray was made and he was sent to Battey State Hospital in Rome. Study there failed to establish a diagnosis of tuberculosis and he was discharged. During the latter part of December 1946 he was hospitalized because of bronchitis and pneumonia. He continued to cough and raise sputum and about four weeks before admission began to have some pain in his right lower chest, which was worse on deep inspiration. He was admitted to the University Hospital for further study. On two occasions during the previous year he had raised blood streaked sputum and on two occasions had coughed up what looked like small bits of tissue. For the week previous to admission he had noted a wheeze. He had had no significant fever and no chills. He had had no cardiac symptoms. He became progressively more dyspneic, particularly in association with paroxysmal coughing.

Physical examination on admission showed a well developed and well nourished 33 year white male, who was apparently not acutely ill. Temperature 98.6 F., pulse 88, respiration 22. Examination of the head, eyes, ears, nose and throat showed no abnormal findings. Examination of the chest showed the trachea displaced to the left. There was an inspiratory lag on the right. Tactile fremitus was decreased on the right. There was slight impairment of the percussion note throughout the right chest. Breath sounds were almost absent on the right. The left side was completely normal to percussion and auscultation. The cardiac size, shape, position, rate and rhythm were within normal limits. No murmurs were heard. Blood pressure 108/74.

X-ray examination (Figs. 2A, B, C) on admission showed an obstructive emphysema involving the right lung with rather a marked shift to the left on expiration.

Bronchoscopy on July 11, 1947 showed a pedunculated tumor mass arising in the right main bronchus almost at the level of the carina. On inspiration the tumor was sucked downward into the main stem bronchus so that the lumen was about 50 per cent obstructed but on expiration it was forced upward and almost completely occluded the bronchus. Examination of the biopsied specimen was suggestive of bronchial adenoma, although not diagnostic.

On July 18, 1947 a right exploratory thoracotomy revealed a plum-sized, fairly firm mass in the region of the right main stem bronchus. The mass was not directly adherent to the surrounding tissue, but was quite densely adherent to all surrounding tissues by inflammatory adhesions and was situated at the origin of the right main stem bronchus. Many enlarged hilar nodes were present. However, none of these appeared grossly to be involved by carcinoma. With some difficulty, because of the inflammatory perihilar adhesions and the perihilar adenopathy, a right pneumonectomy was carried out.

The pathologist's report on the removed tissue follows: "Bronchogenic carcinoma forming a polypoid mass measuring 2.5 by 1.5 cm. and with a base measuring 1 by 0.5 cm. arising from the distal part of the primary bronchus. The tumor almost completely fills the lumen of the primary bronchus and the branch to the upper lobe. Most of the tumor is of the squamous cell type but in some areas it is adenocarcinomatous. Chronic inflammation and pronounced emphysema of the lung. Metastases incompletely replace two of the hyperplastic tracheobronchial lymph nodes.

His postoperative course was uneventful and he was discharged from the hospital July 31, 1947.

Comment: In this case too, there was an interval of at least twelve months between onset of symptoms and the establishment of the diagnosis. A chronic cough progressing over a period of several months, wheeze and hemoptysis with clinical and radiological evidence of obstructive emphysema, were almost certain to be due to bronchogenic carcinoma.

The earliest indication of partial bronchial obstruction is an inspiratory wheeze[1]. As the obstruction progresses there is a serious mechanical barrier to the passage of air in and out of that particular lung or portion of lung. Because of the changing caliber of the bronchus during the respiratory cycle, air passes the obstructing point more easily during inspiration than during expiration, and consequently air becomes trapped distal to the obstructive point and this segment or lobe gradually becomes overinflated. As the obstruction increases and becomes more complete, air is absorbed distal to the point of obstruction with the development of atelectasis[2 11]. As a result of the impairment in bronchial drainage, secondary infection is superimposed and all varieties of pulmonary suppuration may occur. When the patient presents himself for treatment, the symptoms may be predominantly those due to pulmonary suppuration, such as cough, productive of purulent sputum, fever, malaise, etc. On the other hand, the onset of illness may be quite characteristic of a lung abscess except for the fact that there is nothing in the history to explain the development of an abscess. In these cases the obstruction is usually segmental rather than lobar and an abscess develops in that particular segment distal to the point of obstruction. Infection of this sort almost always improves following treatment with antibiotics, just as any other type of abscess, or any other pulmonary suppuration. One should, therefore, be extremely careful in the treatment of such an individual, especially a patient in the middle age group, with a lung abscess or clinical or radiological evidences of pulmonary suppuration. Even though they may improve markedly with administration of antibiotics, they should be followed very carefully and studied in order to eliminate bronchogenic carcinoma[1 4 6 7 8 12].

Case 3. This 63 year old, white, male was admitted to the University Hospital June 7, 1951 with a history of illness dating back to the Fall of 1950. At this time he had had a fairly severe cough but no sputum and was told he had intestinal flu. He remained in bed several days under treatment and his affliction seemed to have subsided completely. Afterwards, however, he began to have recurrent respiratory infection and felt that he had not been free of cold all winter. He had had a slight cough since his intestinal flu but denied any sputum. About one month previous to admission he developed severe headache and fever for several days. For several months he had noted malaise, shortness of breath and, although he had not taken his temperature, he felt he had fever. About ten days before admission his temperature became more elevated and he began to feel much worse. For two weeks before admission he had had a midline wheeze which usually cleared on cough. He denied





Fig. 3A, 3B. Case 3. Postero-anterior and lateral views of the chest showing a large abscess cavity involving the posterior segment of the left upper lobe. No definite mass noted in the hilum.

sputum or hemoptysis.

He was admitted to another hospital where x-ray findings, interpreted as lung abscess on the left, were found, and he was transferred to the University Hospital. For several months his appetite had been poor; he had lost twenty or twenty-five pounds.

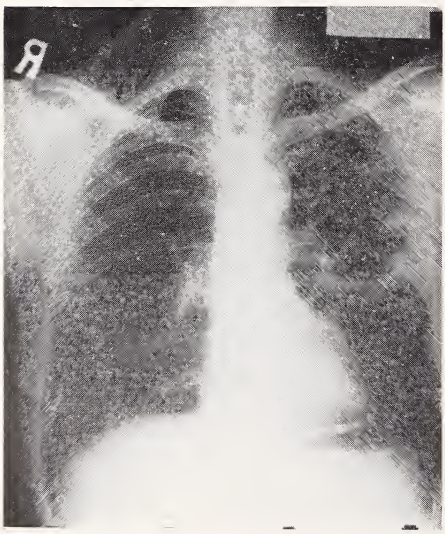


Fig. 3C. Case 3. Posterior anterior view of chest following eight days of antibiotic therapy. Note decrease in size of the abscess cavity. There was concommitant improvement in his general physical condition.

Physical examination on admission showed a well developed, poorly nourished, chronically ill, 63 year old white male. Skin was loose and presented evidence of weight loss. There was no lymphadenopathy. Trachea was midline and the chest was moderately emphysematous. Breath sounds on the left were bronchial in character but otherwise no abnormality was noted. No wheeze or rales were audible.

X-ray (Figs. 3A, B, C) revealed an abscess measuring 6 by 7 cm. located in the posterior segment of the left upper lobe. There was no significant fluid in the cavity and very little pericavitary reaction.

Several sputum specimens were negative on direct smear for acid fast bacilli and on culture for fungi. Sputum cultures grew out a non-hemolytic strep and staph aureus. Bronchoscopy on June 9, 1951 showed neoplastic tissue on the inferior border of the left upper lobe bronchus. Bronchial washings were positive for carcinoma.

On June 18, 1951 an exploratory thoracotomy revealed a hard, nodular mass palpable in the hilum with induration in the posterior segment of the left upper lobe. Many neoplastic hilar nodes were seen, one group of which formed a large mass which directly invaded the arch of the aorta. Even a palliative resection was impossible.

His postoperative course was without significant event and he was discharged from the hospital on June 25, 1951.

Comment: This patient never did fully recover from his original respiratory infection nine months before admission to the hospital. The neoplasm was located in the posterior segment of the left upper lobe and because of obstruction of this bronchus, an abscess developed distally. An earlier investigation of this man's persisting symptoms may have detected this lesion in an operable stage.

The so-called constitutional symptoms of infection and constitutional symptoms of cancer are extremely vague and vagueness enhances their importance. The onset of fatigue in an otherwise healthy individual in the so-called cancer age group should always call for adequate explanation and bronchogenic carcinoma should be eliminated by means of x-ray of the chest and further examination if symptoms indicate[1].

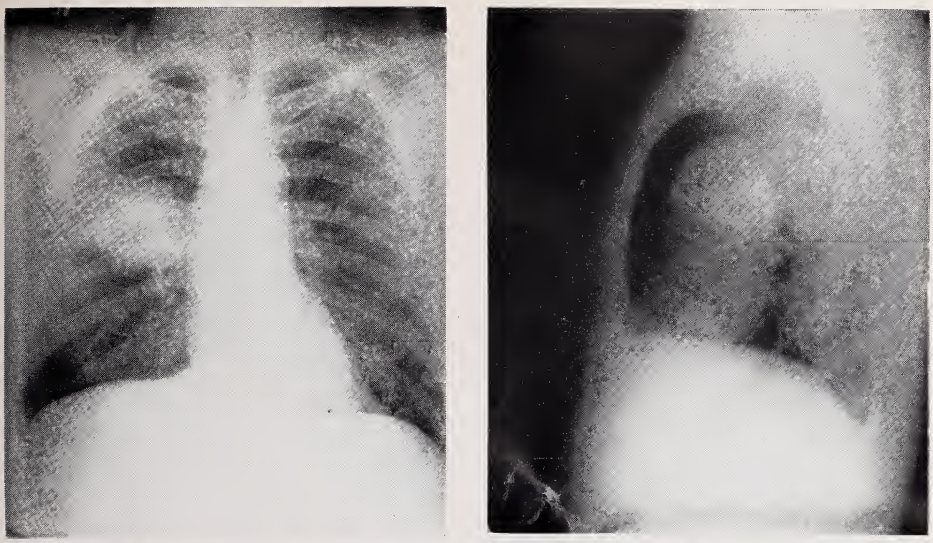


Fig. 4A, 4B. Case 4. Postero-anterior and lateral views of the chest, showing a large mass in the anterior segment of the right upper lobe.

Sometimes fever is the only symptom; this may be due to necrosis within the central portion of tumor as a result of impairment in its blood supply as the neoplasm has progressively enlarged. Therefore, unexplained fever in a patient of this age group should arouse suspicion of bronchogenic carcinoma.

Case 4. This 58 year white male was admitted to University Hospital Oct. 30, 1949. Six weeks before admission he noted the acute onset of fever with rapidly subsiding right pleuritic pain and accompanied by general malaise. His temperature at that time was 101 F. He had chilly sensations but no frank chills. He received penicillin therapy without relief. The chest pain rapidly went away but his fever persisted. Four weeks previous to admission he developed a hacking, dry, cough and had one small hemoptysis. He had noted an

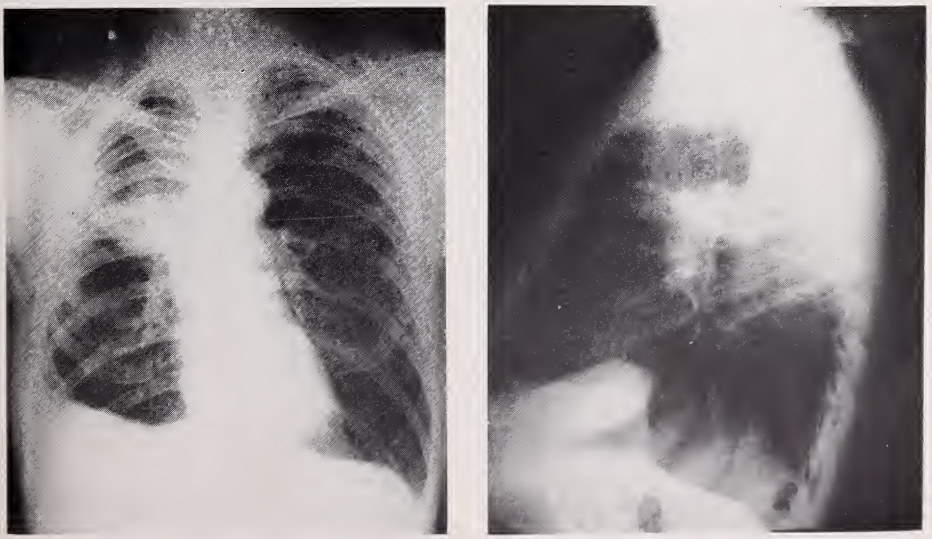


Fig. 5A, 5B. Case 4. Postero-anterior and lateral films of Aug. 10, 1951 showing pneumonic infiltration involving the posterior segment of the right upper lobe.

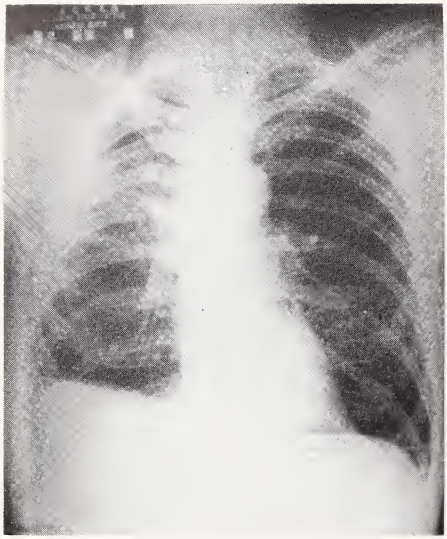


Fig. 5C. Case 5. Film of Sept. 14, 1951, showing incomplete resolution of the pulmonic lesion after six weeks of adequate antibiotic therapy.

intermittent right wheeze. He had had no dyspnea, orthopnea, edema or hoarseness.

Physical examination on admission showed a well developed and well nourished white male who appeared his stated age of 58 years. Temperature 101.8 F., pulse 100, respiration 16, blood pressure 106/80. Examination of the eyes, ears, nose and throat showed those structures to be within normal limits. Neck was supple, no masses or tenderness, no palpable lymphadenopathy.

The thorax was symmetrical. Expansion was equal and adequate bilaterally. The percussion note was normal throughout. Breath sounds were of normal bronchovesicular quality throughout. No rales, friction rubs or wheezes were heard.

X-ray examination (Figs. 4A and B) showed a lobular, homogenous mass in the right mid-lung field. Bronchoscopy on Oct. 31, 1949 showed a tumor mass protruding from the right upper lobe bronchus on cough. This mass was biopsied and the pathologist's report of the removed tissue was "Necrotic tissue with cell shadows suggestive of neoplasm."

On Nov. 3, 1949 a thoracotomy revealed a bulky tumor, occupying one-half of the right upper lobe. No perivascular infiltration or lymph node involvement was seen grossly. A pneumonectomy was carried out.

The pathologist's report of the removed tissue follows: "Spherical mass 10 cm. in diameter involving the right upper lobe extending from 4 cm. from the surgical margin to the pleural surface dorsally and medially. Many areas of necrosis are seen. The neoplasm consists of spherical cells which are large. Most contain one but several contain two to three nuclei. The cells lie in a loose delicate stroma. At the advancing margins they invade the alveoli. Diagnosis: Alveolar cell carcinoma."

His postoperative course was without significant event and he was discharged from the hospital on the 15th postoperative day.

Comment: Frequently a peripherally arising bronchogenic carcinoma reaches an advanced stage before symptoms occur[1 3]. In this case necrosis within the tumor was responsible for the fever. This type of lesion can be detected in its early stages only by survey or routine chest x-rays[1 8].

The diagnosis of unresolved pneumonia should be made with great caution. When a pneumonic lesion does not clear readily or satisfactorily under treatment, one should suspect underlying bronchogenic carcinoma. Frequently, in these cases, bronchoscopy is negative and the neoplasm is found only at exploratory thoracotomy. Recurring respiratory infections in this age group or respiratory infections that do not clear satisfactorily and readily under antibiotic therapy, should always make one suspicious that neoplasm may be the underlying cause[4 10 12].

Case 5. This 53 year old white male was admitted to University Hospital because of unexplained x-ray findings on Oct. 29, 1951. In December 1950 he had a chest x-ray which was reported as negative. In June 1951 he developed a cold with a cough which was productive of thick, white sputum in the morning with some cough during the day. He was progressively more and more ill for two or three weeks when he finally consulted a physician. He was treated with terramycin and took forty capsules without much relief. On the basis of x-ray findings he was referred to Battey State Hospital in July. He stayed at Battey State Hospital for seven weeks and was discharged as nontuberculous. A positive Papanicolaou smear was obtained from bronchial washings at Battey State Hospital.

At the time of his admission he felt quite well and had since his sojourn at Battey State Hospital. He had a slight morning cough with expectoration of viscid white sputum. He had gained ten to fifteen pounds and had a good appetite. He had no chest discomfort, shortness of breath or other symptoms referable to the respiratory tract. He had had a morning cough productive of a very small amount of sputum for many years. There was no history of hemoptysis, dyspnea, orthopnea, wheeze, excessive fatiguability, edema, palpitation or chest pain.

Past History: About eight years previously he had been admitted to the University Hospital for a right empyema which was drained. He smoked approximately one package of cigarettes daily and thought that smoking aggravated his cough.

Physical examination on admission showed a well developed, well nourished, white male, who appeared his stated age of 53 years. The skin was clear and of normal turgor. The head was of normal shape and configuration. Examina-



Fig. 5D. Case 5. Film of Oct. 29, 1951, at the time of admission to University Hospital, showing complete clearing of the pulmonary lesion.

tion of the eyes, ears, nose and throat showed them to be within normal limits except for edentula with full plates. The neck was supple. No masses, tenderness nor adenopathy was palpable.

The thorax was symmetrical, expansion was bilaterally adequate and equal. The percussion note was normally resonant throughout. With the patient in the upright position, breath sounds were of normal quality over both sides of the chest. However, with the patient lying on his back, there was a definite audible inspiratory wheeze which was best heard over the upper, anterior right lung field. No rales or friction rubs were heard. The cardiac size, shape, position, rate and rhythm were within normal limits. No murmurs were heard.

The abdomen was flat and soft, no masses, tenderness or palpable viscera were noted. There was a well healed herniorrhaphy scar in the right inguinal region. No hernia could be made out.

X-ray examination: (Figs. 5A, B, C, D) Films taken at Battey State Hospital showed a rather dense infiltration involving the right upper lobe area which had not cleared at the time of his discharge from Battey State Hospital. Films taken at the University Hospital Oct. 20, 1951 showed complete clearing with only some residual fibrous streaking. Some scattered iodochlorol was seen in the right lung field. There was some contraction of the right rib cage.

Bronchoscopy on Nov. 1, 1951 showed a friable tumor mass protruding from and partially occluding the right upper lobe orifice. Bronchial washings showed clumps of squamous cell carcinoma. Direct biopsy of the lesion suggested an oat cell lesion.

On Nov. 9, 1951 a right exploratory thoracotomy revealed obliteration of the pleural cavity by dense, fibrous adhesions. There was a mass 3 cm. in diameter, surrounding the right upper lobe and right main bronchus. There was nodular infiltration of the membranous portion of the wall of the right main bronchus up to the level of the carina. There were enlarged mediastinal nodes which did not appear grossly to be infiltrated with carcinoma. A pneumonectomy was carried out, resecting the right main bronchus at the level of the carina, and with the superior wall of the right main bronchus, a small portion of the lateral wall of the trachea was removed. Closure of this defect narrowed the left main bronchial orifice slightly.

The pathologist's report on the removed specimen is as follows: "Bronchogenic squamous cell carcinoma, in part cornifying, the lession measuring 3.5 by 3 by 3 cm., involving the right upper lobe bronchus to its origin. 1.5 cm. of uninvolved main stem bronchus is included. The neoplasm involved the hilar nodes by direct extension, also the wall of the left lower lobe bronchus. Chronic tracheobronchitis and pneumonitis of the upper lobe."

His postoperative course was marked only by inability to raise secretions, necessitating frequent tracheobronchial aspirations. He was discharged from the hospital on the twelfth postoperative day.

Comment: Five months prior to admission to the University Hospital this man apparently had an acute respiratory episode which subsided on antibiotics. The pneumonitis noted on x-ray had not cleared and because of suspicion of tuberculosis he was sent to Battey State Hospital. During his stay there the pneumonitis continued to clear very slowly. Two bronchoscopies were reported as negative, but bronchial washings obtained at the time of the second bronchoscopy yielded cells suspicious of carcinoma. A slowly resolving pneumonitis in a 53 year old man with a chronic cough is almost certainly due to bronchogenic carcinoma. Even if bronchial washings had been negative and the positive biopsy had not been obtained, an exploratory thoracotomy would have been done in order to clarify the cause of the persisting pneumonitis.

The solitary pulmonary nodule or coin lesion has received a great deal of attention during recent years. Formerly the majority of these lesions were classified as tuberculomas and the accepted treatment was observation with a close follow-up with x-rays. It was felt that many of these would shell out with spontaneous closure of the residual cavity. With a close follow-up of this type of lesion it was found that many of them proved to be peripherally arising bronchogenic carcinomas and that by the time they had progressed to the point

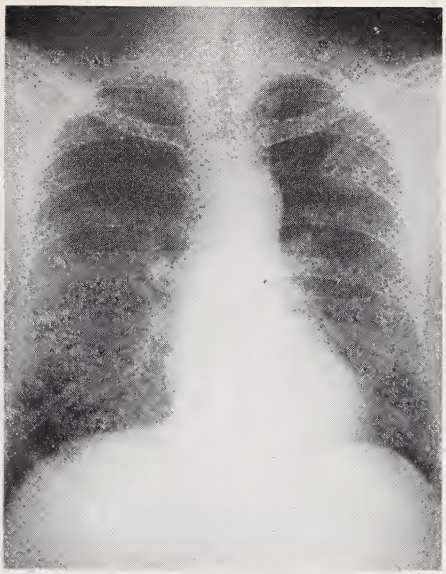


Fig. 6A. Case 6. Postero-anterior film of chest of October 1946, showing a large, solitary lesion of the upper third of the left lung field.

of recognition, they were beyond the limits of surgical cure. Also, by following the tuberculomas closely, it was seen that a significant number ruptured into the bronchial tree with bronchogenic dissemination or into blood vessels with hematogenous spread. In view of the serious potentialities of this type of lesion, the pendulum has swung to the opposite direction so that it is now generally accepted that the solitary pulmonary lesion should be removed. All of these lesions are potentially dangerous and in each case, exploratory thoracotomy is indicated in order to clarify the diagnosis[8 9].

Case 6. This 54 year white male was admitted to University Hospital Jan. 13, 1948. A survey x-ray in October 1946 (Fig. 6A) showed a solitary shadow in the left upper lung field. This was diagnosed as a tuberculoma and he was managed conservatively. In January 1948 x-ray (Figs. 6B, C) revealed progressive enlargement of the lesion. He was asymptomatic and had gained fifteen pounds in the previous year.

Examination showed a well developed and well nourished white male, 54 years of age, of ruddy complexion. He did not appear ill or in pain. Temperature 98 F., pulse 84, respiration 16, blood pressure 190/105.

Examination of the eyes, ears, nose and throat showed them to be within normal limits. The neck was supple. No masses or tenderness were noted, there was no palpable lymphadenopathy.

The thorax was symmetrical. Expansion was bilaterally adequate and equal. The percussion note was normally resonant throughout. A wheeze was heard on the right which cleared with cough. Breath sounds were otherwise normal bronchovesicular in quality. No rales or friction rubs were heard. Examination of the sputum showed it to be negative on direct smear for acid fast bacilli.

X-ray examination showed a 6 cm. density in the posterior portion of the left upper lobe.

On Jan. 16, 1948 a left thoracotomy was carried out with a left pneumonectomy being done. Two large sub-aortic nodes were removed.

Pathologist's report: Anaplastic squamous carcinoma 5 cm.

in diameter in the left upper lobe. Two hilar nodes are involved by metastases. The removed sub-aortic nodes are not involved.

His postoperative course was marred only by episodes of auricular fibrillation and he was discharged from the hospital on Feb. 1, 1948.

Comment: Continued observation of this lesion would have been disastrous. He was followed for fifteen months and his chance for cure would have been increased greatly if he had been resected at the time the lesion was first discovered. Because of the present day low morbidity and mortality following exploratory thoracotomy, and the serious potentialities of these solitary tumors, conservatism should have no role in the management of these cases.

Pleural effusion due to metastasis from bronchogenic carcinoma, may be straw colored during the early stages but usually, as the process progresses, it becomes bloody. A bloody pleural effusion is almost always due to carcinoma. In the earlier stages, however, when the effusion is still straw-colored one has to differentiate between tuberculosis, non-tuberculous inflammatory pulmonary lesion, or malignancy. The majority of tuberculous effusions begin acutely. The development of signs and symptoms of a pleural effusion in the absence of evidence of an acute respiratory infection should make one suspicious of carcinoma. This type of lesion is frequently peripherally arising and is not visible bronchoscopically. Cytological examination of the aspirated secretions frequently yields evidence of cancer cells but in the majority of cases is negative until the effusion becomes bloody.

Case 7. This 46 year white female was first admitted to University Hospital June 2, 1949 because of pain in the left chest. For the three years previous to admission she had had recurrent episodes of dull, aching pain in the left chest which radiated along the course of the intercostal nerves. This pain was not pleuritic in nature. In December 1948 she became acutely ill with fever and with left chest pain of a pleuritic nature. Her fever abated promptly but her chest pain had persisted although with diminished severity until the time of her first admission.

Examination on admission showed a well developed and nourished female who appeared chronically ill. The left chest was dull to percussion in the inferior two-thirds with absent tactile and vocal fremitus and absent breath sounds over this area.

X-ray examination (Fig. 7A) on admission showed findings consistent with a large pleural effusion on the left. O.T. 1:100 was positive.

Several thoracenteses were done yielding from 800 to 1600 cc. of clear, serous fluid. This fluid was negative on culture for acid fast bacilli. Cytological study showed "Occasional cells occurring singly, highly suggestive of malignant cells. Papinacolaou III (on the basis of 1-V). During her hospital stay she was bronchoscoped on two occasions. No significant anatomic aberrations were noted. Bronchial washings obtained at the time of the first bronchoscopy were reported as Papinacolaou III. On the second, the report was negative. After several thoracenteses, repeat x-ray examination (Fig. 7) showed almost complete re-expansion and some increased density in the left apex. She was discharged from the hospital on June 28, 1949 and readmitted on Aug. 1, 1949 with essentially unchanged symptomatology.

Thoracentesis on this admission yielded 1300 cc. of turbid, straw-colored fluid. Pelvic examination, gastrointestinal series and barium enema failed to reveal any abnormal findings. Because of the uncertainty as to the etiology of her pleural effusion, an exploratory thoracotomy was done on Aug. 5, 1949. Extensive pleural carcinomatosis was found with many hard, shotty mediastinal nodes which grossly appeared to be replaced by tumor. What was evidently the primary intrapleural tumor was palpated surrounding and involving the left upper lobe bronchus and the hilum of the left upper lobe. The apical segment of the left upper lobe contained what appeared to be an infarct. One of the hilar nodes with some surrounding pulmonary tissue was removed for biopsy.

Pathology report on this tissue was as follows: "Anaplastic

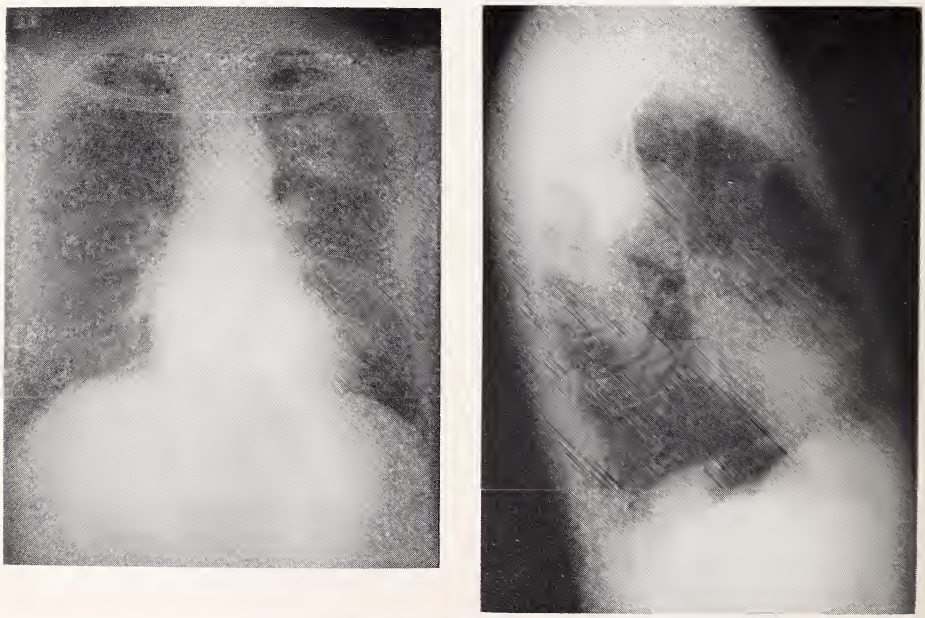


Fig. 6B, 6C. Case 6. Postero-anterior and lateral views of the chest, January 1948, showing the mass occupying the posterior segment of the left upper lobe. There is increase in the size of the mass.

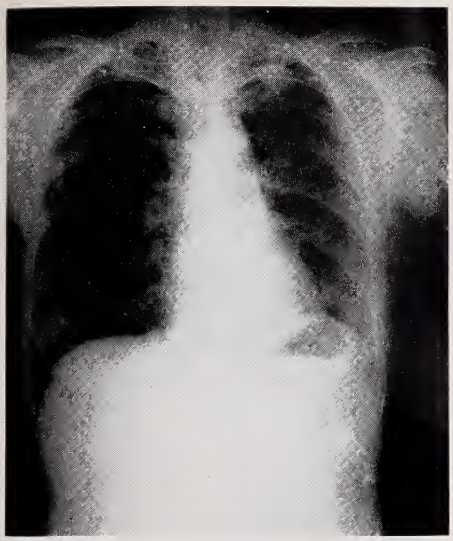




Fig. 7B, 7C. Case 7. Postero-anterior and lateral films showing almost complete re-expansion. The triangular apical density is better shown in these films.

carcinoma permeating the lymphatics of the small section of lung, suggestive of alveolar cell carcinoma."

Postoperative course was uneventful and she was discharged from the hospital on the 16th postoperative day.

The radiological evidence of paralysis of the diaphragm in the presence of bronchopulmonary symptoms usually suggests bronchogenic carcinoma with invasion of the phrenic nerve. Diaphragmatic paralysis in these cases ordinarily indicates inoperability because of the extension of the cancer into the mediastinum. Diaphragmatic paralysis, however, may result from other causes such as stretching or kinking of the phrenic nerve as a result of adhesions associated with infection within the lung. For these reasons it is felt that diaphragmatic paralysis, in itself, should not contraindicate exploratory thoracotomy when there is no other evidence of extension of the neoplasm beyond the limits of the lung.

Case 8. This 50 year white male was admitted to the University Hospital on June 13, 1948. In February 1947 he had an abrupt, small hemoptysis without preceding or succeeding cough. He had never previously spit up any blood and denied symptoms of dyspnea, orthopnea, wheeze, cough, palpitation, edema or chest pain. His wife was known to have active tuberculosis. He was admitted to Battey State Hospital where many sputum specimens were found to be negative for acid fast bacilli. Bronchoscopy at Battey State Hospital showed a tumor on the left lower lobe bronchus and biopsy revealed a bronchial adenoma. He was admitted to the University Hospital for further treatment.

Examination revealed a well developed and well nourished white male who appeared his stated age of 50 years. Temperature 98.6 F., pulse 84, respiration 20, blood pressure 150/90.

The head was of normal configuration. Examination of the eyes, ears, nose and throat showed those structures to be within normal limits. The neck was supple. No masses, tender areas or palpable adenopathy was found.

The thoracic cage was symmetrical with expansion being bilaterally adequate and equal. The chest showed a hyporesonant percussion note with diminished breath sounds in the left base posteriorly. Elsewhere the percussion note was normally resonant and the breath sounds were of normal bronchovesicular quality. No rales, wheeze or friction rub were heard. The cardiac size, shape, position, rate and rhythm were within normal limits.

X-ray examination (Figs. 8A and B) showed the left leaf of the diaphragm elevated two and one-half interspaces. There was a homogeneous increase in density from the upper hilar region on the left to the costophrenic angle. Fluoroscopy showed the diaphragm to be paralyzed with



Fig. 7A. Case 7. Postero-anterior view of chest, showing a pleural effusion on the left. Note the small area of increased density in the left apex.

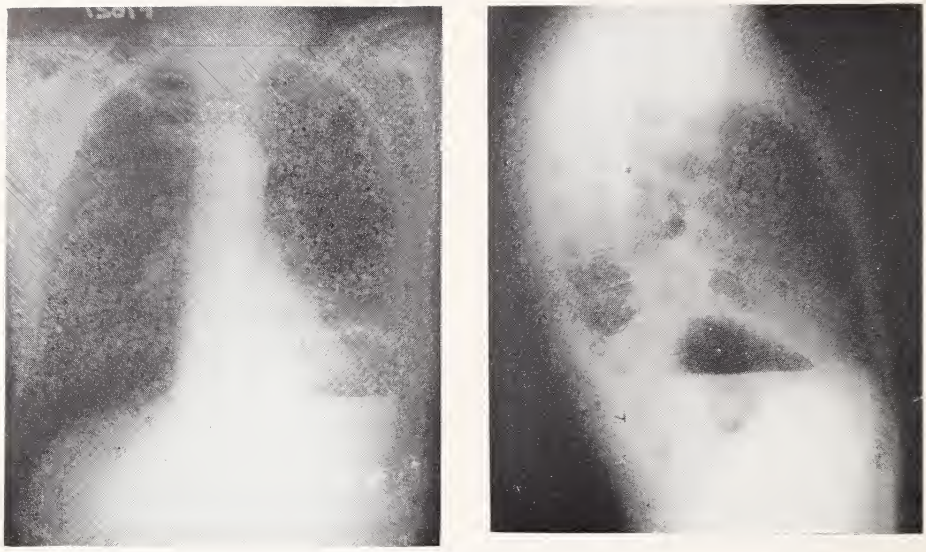


Fig. 8A, 8B. Case 8. Postero-anterior and lateral views of the chest, showing elevation of the left diaphragm. There is a mass in the left hilum, and, in the left base, a shadow suggestive of atelectasis of the left lower lobe.

paradoxical movement. Bronchoscopy on June 14, 1948 showed upward and lateral retraction of the bronchial tree. A tumor mass on the medial wall of the left lower lobe bronchus extended to the level of the left upper lobe bronchus. Since the diagnosis had been previously established, no biopsy was taken.

On June 16, 1948 left thoracotomy revealed a mass 5 cm. in diameter in the left lower hilum. Many enlarged, firm lymph nodes surrounded this mass. A left lower lobectomy was carried out. The phrenic nerve was angulated by inflammatory adhesions.

The pathologist's report of the removed specimen follows: "Bronchial adenoma arising on the medial wall of the left lower lobe bronchus with a 1 cm. surgical cuff. There is direct invasion of the bronchial wall and lung. No lymph node involvement is noted."

His postoperative course was without significant event and he was discharged from the hospital on June 26, 1948.

Comment: Diaphragmatic paralysis here was due to traction from adhesions and return of function was noted several months later.

Hoarseness may be the first indication of underlying bronchogenic carcinoma and represents invasion of the recurrent laryngeal nerve.

Obstruction of the superior vena cava with the very pronounced distention of the jugular veins and edema of the head, neck and upper extremities and the very prominent venous channels over the upper chest as a result of collateral circulation, is quite commonly due to extension of bronchogenic carcinoma to the mediastinum.

Discussion

There is an average delay of twelve months from onset of symptoms to time of diagnosis of bronchogenic carcinoma[9]. Consequently, with the delay in recognition of this disease, the prognosis is extremely poor. In Oschner's series 41 per cent of all cases were inoperable when first seen and of the cases explored only 65 per cent could be resected. Of the entire group the five year survival rate was 6 per cent. By constantly bearing in mind the various manifestations of this disease, the diagnosis can be established earlier and this low five year cure rate improved. Evidences of superior vena caval obstruction, hoarseness, bloody effusion and pain associated with invasion of the chest wall or brachial plexus are all evidences of advanced carcinoma. Unexplained cough, unilateral inspiratory wheeze, hemoptysis, obstructive emphysema, atelectasis, or lung abscess may all be produced by early carcinoma. Unexplained or recurring pneumonias may be on the basis of carcinoma that is still in the curable stage. Bronchoscopy with the added help of cytological examination of bronchial washings, probably yields positive evidence in no more than 60 per cent of the cases. Since the prognosis of bronchogenic carcinoma is poor at best, and the morbidity and mortality of thoracotomy are low, exploration should be done in any case in which this diagnosis is suspected and cannot be eliminated.

Summary

The problems involved in diagnosis of bronchogenic carcinoma have been discussed and cases have been presented to illustrate some of these problems. The delay in diagnosis and consequently low cure rate have been pointed out. Exploratory thoracotomy is advocated in cases in which the diagnosis is in doubt.

REFERENCES

1. Adams, R.: Primary Lung Tumors. J.A.M.A. 130:547, 1946.
2. Cohen, A. G.: Obstructive Emphysema and Atelectasis in the Same Lung, Resulting from Bronchogenic Carcinoma. J. Thoracic Surg. 12:714, 1943.
3. Edwards, A. T.: Malignant Disease of the Lung. J. Thoracic Surg. 4:107, 1934.
4. Graham, E. A.: Primary Carcinoma of the Lung or Bronchus. Ann. Surg. 103:1, 1936.
5. Lindskog, G. E.: Bronchogenic Carcinoma. Ann. Surg. 124:667, 1946.
6. Moyer, J. A., and Ackerman, H. J.: Bronchogenic Carcinoma as a Differential Diagnostic Problem in Pulmonary Diseases. I. Carcinoma Arising from Major Bronchi Uncomplicated by Secondary Infection. Amer. Rev. Tuberc. 63:176, 1951.
7. Ibid. Bronchogenic Carcinoma as a Differential Diagnostic Problem in Pulmonary Disease. II. Carcinoma Arising from Major Bronchi Complicated by Infection. Amer. Rev. Tuberc. 63:258, 1951.
8. Ibid. Bronchogenic Carcinoma as a Differential Diagnostic Problem in Pulmonary Disease. III. Peripheral Type Carcinoma Arising from Minor Bronchi and Bronchioles. Amer. Rev. Tuberc. 63:399, 1951.
9. Ochsner, A.; DeCamp, P. T.; DeBakey, M. E., and Ray, C. J.: Bronchogenic Carcinoma. J.A.M.A., 148:691, 1952.
10. Mulligan, R. M., and Harper, F. R.: The Morphology of Primary Carcinoma of the Human Lung. J. Thoracic Surg. 12:734, 1943.
11. Rigler, L. G., and Kelby, G. M.: Emphysema—an Early Roentgen Sign of Bronchogenic Carcinoma. Radiology 49:578, 1947.
12. Tuttle, W. C., and Womack, N. A.: Bronchogenic Carcinoma—a Classification in Regard to Its Treatment and Prognosis. J. Thoracic Surg. 4:125, 1934.
13. Vinson, P. P.: Clinical Manifestations of Tracheal and Bronchial Obstruction with Certain Bronchoscopic Observations. Med. Clin. North America 19:453, 1935 (quoted by Cohen, A. G.).

DISCUSSION

Dr. Herbert M. Olnick (Macon): The authors have crystalized well the manifestations of early cancer of the lung, correlating clinical symptoms and signs and the x-ray picture with the underlying pathophysiologic mechanisms.

I have seen more cases of cancer of the lung than of the stomach in the past two years of practice of Radiology in Macon. Next to chest men, radiologists have been exposed to more material emphasizing the problem of lung cancer than the majority of the profession and in numerous communities throughout the state, they serve as the chief detective on the trail of this vicious criminal.

The authors have presented well the insidious character of this disease. Symptoms that used to be indicative of tbc, noted in a patient over 35 who never before had chest trouble, have as good if not better chance of being due to neoplasm. A normal x-ray in a patient with symptoms suggestive of early cancer calls for a more thorough investigation.

Radiologists can serve a notable service in the reading of survey films by screening out inactive scars, pleural thickening and putting the finger of suspicion on the cancer patient even before symptoms are present. The authors have illustrated the varied picture which cancer of the lung may present. In the asymptomatic individual presenting the pattern illustrated in this slide, the man reading routine films can feel quite comfortable in labelling this infiltrate as minimal tuberculosis. However, every lesion in the upper lobe is not tuberculosis and I am quite hesitant to label any other early lesion as such from an x-ray viewpoint. Notice (slide) the multinodular pattern with streaks to the hilum. Notice also the characteristic location in the posterior division of the upper lobe.

EYE LASHES

Embedded in the Lens

MORGAN B. RAIFORD, M.D., Atlanta

Eye lashes found as intra-ocular bodies in the anterior chamber are not rare. The review by Sharpe in 1925 reported a total of seventy-five cases in all medical literature at that time. Graff added an additional thirty cases in 1933, and Cowan twenty-nine cases in 1942. The number of cilia in the anterior chamber varied from one to fourteen in number.

A cilia within the lens substance is most unusual with only two cases reported in the literature, the first of which was by Von Hippel in 1927 where a cilium was identified in the anterior cortex of the lens in a sixteen year old patient on corneal microscopic section. The history of injury in this case was not available. The second case of a single cilia was by Byrnes in 1949 on a twenty-eight year old army officer who sustained an injury to the left eye at the age of twelve; here the vision was OD 20/15, OS 20/25.

The case now reported is significant in that no previous occurence of two cilia embedded in the lens has thus far been recorded in the literature and is the only one in which photographs have been obtained. Also, there is the unique fact that the patient was totally unaware of any defect of the eye until some blurring of vision occurred.

History: Mrs. W. A. L. (wf32)—While hanging out laundry in August 1951, the patient reached in the clothes pin bag, and on its release a sting was

From Ponce de Leon Eye, Ear, Nose and Throat Infirmary, Atlanta.

felt in the right eye; this was later identified as the wire attachment to the clothes line from the bag. Only transitory tearing was noted with no further pain or symptoms until the latter part of October 1951 when the patient noted that the right eye tired on reading, and objects had begun to blur. She was first examined Dec. 6, 1951 because of increased blurring and dimness of vision, and occasional headaches.

Examination: Vision without correction was OD 20/200, OS 20/30-2. There was not ptosis, nystagmus or exophthalmos. A small V-shaped scar of the mid-lower right lid was visualized under slit lamp; the left lids were clear. A slight limbal injection of the conjunctiva of the right eye was noted. The lacrimal apparatus was normal, and the sclera was clear. There was a small L-shaped scar of the right cornea 3 mm. up from the limbus at 5 o'clock, showing complete perforation of the entire cornea on microscopic examination. The anterior chamber was of normal depth in both eyes. The irides were blue. A posterior synechiae of the right eye (Fig. 1) existed with adhesions against the anterior lens capsule, but the iris of the left eye was clear. The pupils reacted to light and accommodation, and were consensual. The right lens (Figs. 1 and 2) was moderately opaque in the lower three-fourths of the entire cortex. Two cilia were seen within the lens stroma; the anterior one was inverted with the root bulb of the eye lash placed superiorly and angulated toward a nasal position. The second eye lash was resting in the posterior half of the cortex of the lens, and was seen only when the pupil was fully dilated because of the posterior iris synechiae; it was in a semi-transverse position with the root bulb being on the temporal side. The upper one-fourth of the lens substance was clear enough to reveal a normal fundus and vitreous structure. The left lens was clear and normal. At funduscopy the discs were oval, flat and clearly outlined. Blood vessels were normal, and maculae and periphery were clear, as was the vitreous. No hemorrhages or exudates were noted. Intraocular tension (Schiotz) was 15.0 in each eye.

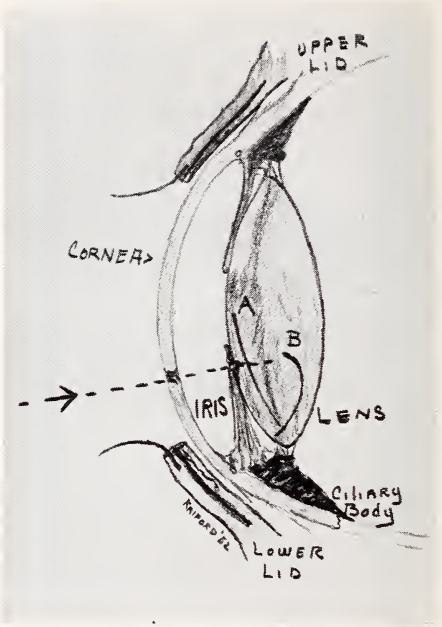


Fig. 1. Drawing illustrating angle of entrance by wire (dotted line) through cornea placing cilia A and B in lens stroma. The iris has posterior synechiae and the lower lens is opaque.

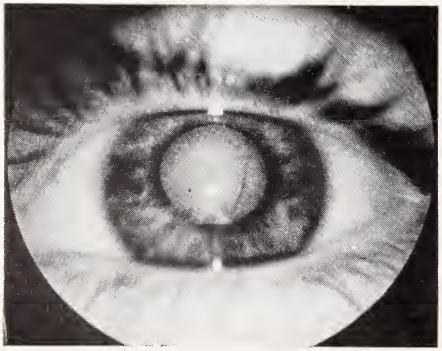


Fig. 2. Photograph showing both cilia in lens stroma, the larger one anterior (A Fig. 1), and the smaller one (B Fig. 1) being angulated and posterior.

The patient was told of her condition and of the traumatic cataract. She was advised to have cataract extraction when her visual impairment progressed.

Examination: (Feb. 2, 1952) Vision in the right eye was limited to light perception, with separation of light 1 cm. at 2 meters distance; color perception was good. Vision in the left eye was 20/30-2. The cornea of the right eye was the same as on the initial examination, and there was no evidence of any inflammatory change on slit lamp examination. The anterior chamber was clear. The posterior synechiae of the right lens showed slight depigmentation at the location of the fibrous adhesions. The pupils reacted to light and accommodation and were consensual. The entire right lens was diffusely opaque. There was a posterior synechiae with adhesions about the iris and site of the lens penetration by the wire at 6 o'clock (Fig. 2). The two eye lashes were in a vertical position in the lower half of the lens stroma, one being anterior and vertical, and the posterior cilia below and slightly obliquely placed (Fig. 2).

On Feb. 2, 1952, an extra-capsular lens extraction was done; the stroma had degenerated to a viscoid state. The anterior chamber was entered by keratome and enlarged by scissors. The posterior synechiae were freed by a cataract knife. Four corneo-

scleral 6˝ chromic catgut sutures were taken, and air was placed in the anterior chamber. The two eye lashes were preserved.

SUMMARY

1. A case of two intra-lenticular cilia is reported, having an extra-capsular cataract extraction.

2. The increased density of the lens was apparently due to the perforation of the lens capsule with added irritation of the oils on the cilia themselves.

144 Ponce de Leon Ave., N. E.

BIBLIOGRAPHY

1. Byrnes, Victor A.: Eye Lash Buried in Clear Lens Substance, Am. J. Ophth. 32:847-849 (June) 1949.

2. Cowan, Jack P.: Cilia Implantation in Anterior Chamber Through Traumatic Corneal Perforation. Am. J. Ophth. 25: 721-722 (June) 1942.

3. Thorpe, Harvey E.: Nonmagnetic Intraocular Foreign Bodies, J.A.M.A. 127:197-203 (Jan. 27) 1945.

4. Thorpe, Harvey E.: The Management of Nonmagnetic Intraocular Foreign Bodies. Surg., Gynec. & Obst. 84:809-822 (April 15) 1947.

5. Smith, James W.: Cilium in the Anterior Chamber, Arch. Ophth., 44:424-428 (Sept.) 1950.

6. Sharpe, O. A.: Cilia in Anterior Chamber. Am. J. Ophth., 8:301-306, (April) 1925.

7. Von Hippel: Cilia in Lens, Ber. u. d. Veroamml. d. Deutsch Ophthl, Geselsch, 46:408, 1927.

8. Fox, L. W.: Cilia in Abnormal Locations, Am. J. Ophth. 11:297. (April) 1928.

9. Graff, H. F.: Cilia in Anterior Chamber, Am. J. Ophth. 16:126, (Feb.) 1933.

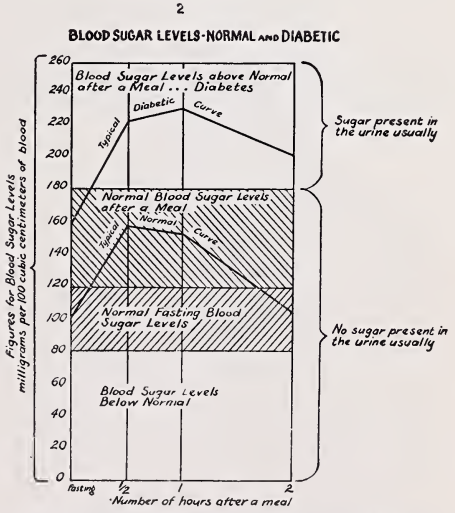
Management of the

DIABETIC PATIENT

C. J. WYATT, JR., M.D., Rome

After the diagnosis of diabetes has been definitely established, a conference with the patient is advantageous. An air of optimism on the part of the physician is important, as the patient is usually discouraged. He may believe that he is saddled with a chronic disease for which there is no cure; that he is doomed to a life governed by a strict diet, frequent checking of urine for sugar, and curtailment of normal activities; that if insulin is necessary, it will have to be taken for the rest of his life, and that the cost of the medical care of a diabetic is prohibitive. The patient should be told that 30 to 50 per cent of those who have to be started on insulin are able to discontinue the injections in a reasonable length of time. It is well to emphasize to the patient that the life expectancy of a diabetic is almost as great as the normal life expectancy, and that actually many diabetic patients outlive the normal life expectancy. The prognosis for the intelligent and cooperative patient is excellent if the diabetes is identified early and treated diligently by an interested physician.

One can also explain to the patient how diabetes is recognized and diagnosed. The chart at right is most helpful.



(Reproduced from Diabetic Care in Pictures: Rosenthal; Stern, and Rosenthal, Philadelphia, J. B. Lippincott Company, 1946)[3].

One may have diabetes without the classical signs and symptoms, and then the diagnosis must be made by finding glycosuria, and by checking blood sugars.

In nondiabetics, a blood sugar before breakfast should be at normal fasting levels (80-120 mg. per cent). After the meal, the blood sugar rises to 120-180 mg. per cent, and then at the end of two hours returns to normal fasting levels. The greatest rise in the blood sugar occurs from one half to one hour after eating.

In the diabetic, on the other hand, the fasting

Read before the Spring Meeting of the Seventh District Medical Society, Dalton, April 23, 1952.

sugar may sometimes be at normal levels, but usually is higher. When a meal is taken, there is a rise above normal in blood-sugar levels at the end of one hour (greater than 180 mg. per cent). The blood sugar does not return to normal fasting levels at the end of two hours and may continue to remain high for two or three hours or longer.

The new diabetic patient must be given *diet instructions*. The dietary needs are conditioned by age, sex, body weight and occupation. The patient whose diabetes is well controlled needs no more and no less food to accomplish the same results than the normal person. It is important to restrict the calories for those who are overweight. Duncan in Philadelphia states that changes in the total calories have a more far-reaching effect on the insulin requirement than have changes in the allowance of carbohydrate. He also believes that it is desirable to have the long-term diet contain 225 to 300 grams of carbohydrate.

Rabinowitch, Mason, and others in Montreal, for almost twenty years, have advocated an adequate protein, low fat, moderately high carbohydrate diet. I have used such diets and found them quite satisfactory. On a diet containing 70 grams protein, 50 grams fat, and 250 grams carbohydrate (totaling approximately 1750 calories), the patient may eat the following in a day:

BREAKFAST:	Strawberries—average serving Oatmeal (cooked)—¾ cup Egg—1 Milk—½ cup Bread—1½ slices Butter, 1 piece, 1 x 1 x 1/3 inches Honey—2 teaspoonfuls
10 A. M.	Orange juice—average serving
DINNER:	Lean meat—2 ounces Potato—1 medium sized String beans—½ cup Asparagus—½ cup Bread—1 slice Butter—2 pieces (as above) Milk—¾ cup Pineapple—average serving
3 P. M.	Peaches—average serving
SUPPER:	Chicken—2 ounces Green corn—½ cup Beets—½ cup Apricots—average serving Bread—1 slice
10 P. M.	Milk—¾ cup Soda Cracker (small square)—1

This is an approximated rather than a weighed diet.

Pictures such as those at right are great aids in helping the patient learn how to approximate their diet.

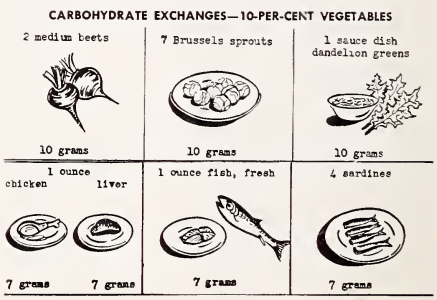
Common sense supports the principle of high carbohydrate feeding in diabetics. The liver that is rich in glycogen handles glucose entering the portal circulation more efficiently. It has been shown that by depriving a *normal* individual of sugar and starch for a few days, the liver glycogen will be so depleted that the glucose time curve will simulate a mild diabetes. Many patients with an imparied glucose curve show an improvement in the glucose curve after a few days on a low fat (50 gram), moderately high carbohydrate (250-350 grams) diet.

With the low fat, high carbohydrate diet— as contrasted with the high fat (150 grams), low to medium carbohydrate (60-100 grams) diet,—I believe that one can make the following statements:

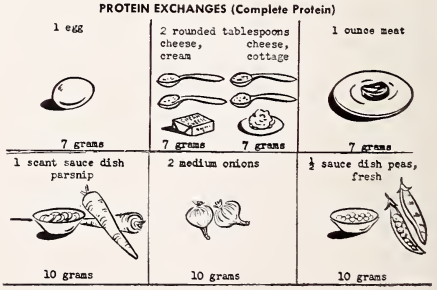
1. The average initial insulin requirement is moderately larger, but within three months it is the same, or less.
2. A progressive improvement of carbohydrate tolerance continues over years. This was not seen with the high fat diet.
3. Weight is maintained with fewer total calories (1700-1900).
4. The blood cholesterol averages lower.
5. The onset of arteriosclerosis and degenerative cardiovascular conditions is probably delayed.
6. The incidence of acidosis is much less.
7. There is less weakness in elderly diabetics.
8. Infections are tolerated better, due to a greater glycogen reserve.
9. The tissues have better healing power.
10. The diet is cheaper and is less upsetting to the home, and more palatable to the patient. No special foods are required.

The next consideration is *INSULIN*. Insulin is an aid, not a cure, in the treatment of diabetes. Its use is indicated when a diet suitable for the needs of the patient will not alone control the diabetes.

3



4



(Reproduced from Diabetic Care in Pictures: Rosenthal; Stern, and Rosenthal, Philadelphia, J. B. Lippincott Company, 1946)[3].

As you know, insulin is now available in five forms:

1. Regular insulin—With rapid action, of short duration, approximately 4 to 8 hours.
2. Crystalline zinc insulin (CZI)—Exerting effects clinically indistinguishable from those of regular insulin.
3. Globin insulin—With a slower and longer action, 16 to 24 hours.
4. Protamine zinc insulin (PZI)—Which goes into action slowly, but exerts a blood-sugar lowering effect for 24 to 36 hours.
5. NPH insulin—With an intermediate effect.

Many still favor the use of regular or crystalline zinc insulin (CZI), and protamine zinc insulin (PZI), either alone or together (being given separately). Mixtures of the two are at times very effective, but often better results are obtained when the two insulins are injected separately.

The diabetic being regulated for the first time *IN THE HOSPITAL* can have the elevated blood sugar reduced as quickly as possible by frequent doses of plain insulin. If reactions occur, these can be discovered, diagnosed, and treated at any time by an experienced nursing staff. Before discharge from the hospital a change can be made to another type of insulin, if it is felt that the patient can be managed better on some other kind, or combinations of two kinds.

IN THE OFFICE, on the other hand, the blood sugar will have to be reduced more slowly, avoiding insulin reactions which which might not be recognized and treated by the new patient or those about him. Initially, the patient must report by phone or be seen every few days. Blood sugar determinations must be made from time to time; the patient must make frequent urine tests for sugar. But the new diabetic who can be handled in the office is often most grateful. No time is lost from work; he can carry on his usual activity; the expense of hospitalization is avoided. As far as the physician is concerned, such an office regulation is often most satisfactory. One reason for this is that the usual amount of exercises and physical activity of the patient is desired. This helps to burn sugar in the body, and contributes to physical fitness. Frequently, hospital patients, perfectly regulated at time of discharge, have insulin reactions on the outside in a short time, because of the need for less insulin, due to an increase in exercise and activity. Therefore, during the regulation period of a diabetic, it is most preferable for the patient to maintain his usual activity. Of course, complications of diabetes, such as infections, gangrene, and acidosis, usually necessitate bedrest and hospitalization.

The patient must be taught the various kinds and strengths of insulin, and their effects. He must know his insulin dosage and the kind of insulin being taken. He or someone available, must be taught how to boil and handle syringe and needle; how to withdraw insulin into the syringe; where and how to inject this into the body.

Any patient receiving insulin must be told of the diverse symptomatology of insulin reactions, and instructed in the treatment of such.

The patient must learn how and when to test urine specimens for sugar. The *Clinitest Urine-sugar Analysis Set* is convenient and simple for the patient to use, and satisfactory. Urine samples should be tested for sugar at definite times, partially dependent upon the kind of insulin being employed.

The patient should keep a record, indicating dates and times; insulin dosage; results of the tests for sugar in the urine; possible insulin reactions; any deviation from the prescribed diet. Over a period of time, the diabetic should learn as much as possible about his disease as he is able to comprehend. Diabetic manuals—written for the patients—are most helpful. A very good such book is one entitled Diabetic Care in Pictures—written by a group of Boston physicians and published by J. B. Lippincott Company.

It is best to check the diabetic patient at definite intervals, depending upon the degree of control of the diabetes, and whether changes in treatment are underway, or not. For the patient's convenience, one may in some instances obtain a random, postcibal sample of blood for sugar determination. The value thus obtained must be interpreted by considering when and what the patient had eaten, and how long afterwards the blood sample was taken.

The following cases will illustrate some of the things previously mentioned, and show how an attempt is made to manage average diabetic patients, usually seen in the office:



Table 1

H.D.H.—White—Female—35

Date	*B.S.*	*Insulin*	*Wt.*	*Diet*	
4-27-51	272—Fasting 420—1 hr. after glucose	PZI-20	185	70-50-210	
4-31-51	215	PZI-20	183	"	
5- 4-51	140	PZI-20	181	"	
5- 9-51	149	PZI-20	180	"	Office
5-23-51	132	PZI-20	174	"	
6-13-51	100	PZI-16	168	"	
6-29-51	157 (PC)	PZI-12	163	"	
7-13-51	126	PZI- 8	160	"	
7-27-51	110	0	157	"	
8-10-51	122	0	152	"	
9- 7-51	116	0	147	"	
10-30-51		0	143	"	
11-12-51	110	0	139	"	
1-21-52	116	0	127	Slight increase	

No definite symptoms. Glycosuria discovered on routine urinalysis. Overwight for years. The elevation of blood sugars left no doubt as to the diagnosis of diabetes. She was placed on a diet of Protein 70, Fat 50, carbohydrate 210. In three months, fasting blood sugar was normal. She had lost 28 pounds, and was able to discontinue insulin. The weight loss has continued and blood sugars have been normal without insulin.



Table 2

E.E.H.—Female—White—55

Date	*B.S.*	*Insulin*	*Wt.*	*Diet*	
7-11-50	337	PZI-28	135	70-50-250	
7-14-50	190	PZI-28	136	"	
7-18-50	180	PZI-20-24	136	"	
7-25-50	106	PZI-20	136	"	
8- 5-50	131	PZI-16	135	"	
8-12-50		PZI-12	136	"	Office
8-25-50	82	PZI- 8		"	
9- 4-50		0	135	"	
9-18-50	85	(PC) 0	135	"	
10-20-50	105	(PC) 0	134	"	

Symptoms for one month (Thirst, polyuria, pruritis, weight loss of 10 pounds). The weight was maintained on a diet of Protein 70, Fat 50, carbohydrate 250. After seven weeks the patient was able to discontinue insulin and blood sugars remained within normal limits.

Table 3

P.R.G.—White—Female—50

Date	*B.S.*	*Insulin*	*Wt.*	*Diet*	
7-26-50	298	PZI-20		70-50-200	
		CZI-20			
7-29-50	361	CZI-32		"	
		PZI-20			Floyd
7-31-50	280	PZI-32			Hosp.
		CZI-16-0-20		"	
8- 4-50	275	PZI-40			
		CZI-20			
11-18-50	201	?*		Lack of Cooperation	
1-12-52	310	PZI-40		quite evident.	
		CZI-20-0-20?	163		
1-19-52	302	(PC) ?**	164		Office
1-26-52		PZI-40		Admits drinking	
		CZI-30-0-30	167	Cokes and eating	
2- 2-52			167	extra bread	

2-16-52—Did not appear for office appointment

Pancreatitis (?), November, 1948. Symptoms for six weeks. Glycosuria found on routine examination. Results poor here. This is a more severe diabetic and she was discharged from the hospital on fairly large doses of Protamine and Crystalline zinc insulin. Four months later* the patient was seen in the office; at which time she did not know her insulin dosage, as her husband gave the injections. She was asked to have him report to the office, but he did not do so. This patient was not seen again for 13 months.** At that time, she thought that the insulin dosage was Protamine Zinc Insulin, 40 units, and Crystalline Zinc Insulin, 20 units, before breakfast and supper. After bringing syringe to the office, it was found that she was actually being given only half the insulin dosage. She was placed on a strict diet, but gained three pounds within the next week and admitted to drinking cokes and eating extra bread. A few weeks later she failed to keep an office appointment, and probably will not be seen for some time. It is impossible to help a patient like this.

Table 4

A.A.S.—White—Male—63

Date	*B.S.*	*Insulin*	*Wt.*	*Diet*	
4-16-50	277				
4-18-50	285	PZI*			
		CZI			Floyd
4-22-50	136	PZI-20		70-50-250	Hosp.
5- 2-50	214	(PC) PZI-20	173	70-50-250	
5-31-50	131	(PC) PZI-16	174	"	
7- 5-50	200	(PC) PZI-16	178	"	
8- 2-50	151	(PC) PZI-16	179	"	
10- 9-50	202	(PC) PZI-20	178	"	Office
1-22-51	237	(PC) PZI-?	180¼	"	
8-15-51		PZI-16?**		"	
10-24-51	340	(PC) PZI-16		"	
2- 4-52	250	(PC) PZI-16	176½	"	

*Insulin varied.
**Actually taking only 8 units.

Glycosuria found by another physician three years ago. Diet, no insulin. Symptoms for months. Seen for first time in hospital, with virus infection. During 1950, patient got along nicely. In 1951, he became careless, and for a time was taking only half the insulin prescribed. For convenience, blood sugars were taken 1½ hours after breakfast. He is an average diabetic, cooperating only moderately well at the present time.

Table 5

H.V.W.—White—Female—62

Date	*B.S.*	*Insulin*	*Wt.*	*Diet*	
11-22-50	190	(PC) PZI-20	119	70-50-250	
11-27-50	216	(PC) PZI-20	119	"	
12- 5-50		PZI-28	118	"	
12-19-50	288	(PCL) PZI-24	117	"	
1- 8-51		PZI-20-28	116	"	
1-29-51		PZI-24	116	"	
3- 1-51	226	(PC) PZI-24	113	"	Office
5- 1-51	140	(PC) PZI-24-20	117	"	
6- 4-51	170	(PC) PZI-28	116	"	
7- 9-51	164	(PC) PZI-24	116	"	
8-28-51	226	(PC) PZI-20	120	"	
10- 2-51		PZI-?		"	
11- 1-51	226	(PC) PZI-16	119	"	
1-14-52	206	(PC) PZI-20	118	"	

Known diabetic—3 years, insulin for past year only. Weight loss of 18 pounds on diet; taking NPH—35 units, but reactions, and reduced this herself to 25 units. Changed physicians. This patient was able to maintain her weight on a diet of Protein 70, Fat 50, Carbohydrate 250. She has had no reactions and has felt fine. P. C. blood sugars have been satisfactory, in general.

To Summarize

The Diabetic Should Know:

1. A brief account of the nature of his disease, and the importance of diet in its treatment.
2. The preparation of the diet (an approximated diet rather than a weighed one is usually adequate, and more satisfactory for the patient).
3. The administration of insulin (the various kinds and their effects). The recognition and treatment of hypoglycemia.
4. How to examine urine for sugar. What urine specimens to test.
5. When to see the physician (at appointed times, and also if too frequent or severe insulin reactions occur; if glycosuria becomes more marked or constant; if complications arise).
6. The commoner complications (coma, gangrene, infections), and how they can be avoided.

The success of all diabetic treatment depends upon an intelligent cooperation on the part of the patient; the physician himself must insist upon this.

The Harbin Clinic, Rome

REFERENCES

1. Duncan, G. C.: Diabetes Mellitus, Principles and Treatment, Philadelphia, W. B. Saunders Company, 1951.
2. Mason, E. H.: Diseases of Metabolism, From Meakin's Practice of Medicine, Ed. 4, St. Louis, C. V. Mosby Company, 1944.
3. Rosenthal, H.; Stern, F., and Rosenthal, J.: Diabetic Care in Pictures, Philadelphia, J. B. Lippincott Company, 1946.

Table 6

J.C.P.—White—Female—48

Date	*B.S.*	*Insulin*	*Wt.*	*Diet*	
7-22-50	271 (R)				
7-23-50		CZI-20	193	70-50-200	
		PZI-20			Floyd
7-25-50	288	"		"	Hosp.
7-27-50	221	PZI-24		70-50-150	
8- 2-50	169 (PC)	PZI-20	193	70-50-150	
8-21-50	126 (PC)	PZI-16	190	"	
9-11-50		PZI-12		"	
9-18-50	185 (PC)	PZI-12	182	"	Office
10-23-50	190 (PC)	PZI-12	178	"	
11-11-50	166 (PC)	0	171	"	
1-29-51	188 (PC)	0	165	"	
April, 1951—Vaginal Hysterectomy and repair of recto-vaginal fistula—good results. (Floyd).					
9- 6-51	138 (PC)	0	172	?	Office

Obese (weighed 235 pounds in 1949). Polyuria and vaginal discharge, of short duration. Recto-vaginal fistula. This patient was able to discontinue insulin after losing 22 pounds. An operation was done five months later, with normal healing. She has now gotten along nicely for 18 months without insulin.

THERAPEUTIC *and* DIAGNOSTIC *Use of* PROCAINE

HAYWARD S. PHILLIPS, M.D., and
JAMES C. THOROUGHMAN, M.D., Augusta

Since procaine for the production of local anesthesia is a drug familiar to all physicians it is our purpose to re-emphasize the wide range of usefulness of this and other commonly used local analgesics as therapeutic and diagnostic agents. Equipment for these procedures is available in every doctor's office, the technique is simple, the time required is brief, relief is rapid and many of these patients are permanently benefitted.

No attempt will be made here to review all the literature on this subject. Some indications for this procedure may best be illustrated by reviewing a series of cases seen since August 1951 at the Veterans Administration Hospital, Augusta.

Relief of pain by the injection of local anesthesia with increased range of usefulness of the affected part does not relieve the doctor of the responsibility for an accurate diagnosis of the underlying cause of pain. An editorial in a recent issue of *The Journal of the American Medical Association*[1] calls timely attention to the dangers attending the promiscuous use of procaine in sports injuries without accurate diagnosis and without sound judgment in preventing further damage after the relief of pain. Although the

Read before the Section on Industrial Surgery and Trauma at the Annual Session of the Medical Association of Georgia, May 14, 1952.

local therapeutic use of these analgesic drugs is of great value, it is obvious that it is frequently desirable to employ supplementary measures of treatment.

Gorrell[2] in an editorial in the *American Journal of Surgery* has stressed the careful selection of patients in whom this method of treatment is chosen and gives the following contraindications for injection for pain:

1. History of a nervous breakdown.
2. Complaints of symptoms from head to toe.
3. Patients receiving and enjoying compensation.
4. Those who cannot accurately localize the pain.
5. The patient who does not honestly want relief from pain.
6. Patients who give a clinical impression of a psychopathic personality or who appear constitutionally inferior.

Briefly, the theory of therapeutic injections of analgesic drugs is to break up the self-propagating vicious cycle of trauma-spasm-pain-spasm-pain. The initial trauma may be an external injury of mild or great degree or muscle spasm from postural or occupational strain, or spasm from nerve pathology.

Procaine, pontocaine, xylocaine and efocaine were the anesthetic drugs used. The place of each of these drugs will be discussed later in this paper. Over one-hundred twenty injections, of 16 different types were used on 62 patients in this series.

Therapeutic and diagnostic blocks of the following types were used:

Table 1
THERAPEUTIC BLOCKS

1.	Intercostal blocks	15
2.	Injection of back muscles	15
3.	Shoulder blocks	13
4.	Torticollis—wry neck	2
5.	Ankle ligaments	1
6.	Stellate blocks	16
7.	Sciatic nerve	5
8.	Coxalgia	3
9.	Supra-orbital nerve	3
10.	Celiac plexus	1
11.	Lumbar sympathetic	9
12.	Post-hemorrhoidectomy	10
13.	Post-thoracotomy	13

Table 2
DIAGNOSTIC BLOCKS

1.	Sciatic nerve	5
2.	Blocks for arterial spasm	5
3.	Obturator nerve	2
4.	Lumbar sympathetic	9
5.	Ulnar nerve	1

Fractured Ribs. Intercostal blocks were done and the results have been most satisfactory in 7 cases of fractured ribs. Two patients with multiple fractures were discharged from the hospital 24 hours after admission. One patient with fractured ribs was treated on an out-patient basis and lost no time from his work. Relief has been prompt in all cases, although daily blocks for 2 or 3 days after injury are frequently necessary.

Case 1. A white male age 73 was admitted to the hospital with a diagnosis of fractures of the 6th, 7th, 8th, 9th, 10th and 11th ribs on the left side with fracture of four ribs on the opposite side. Fracture of the pelvis was also present. Respirations were shallow and very painful. The patient was apprehensive, generally depressed and showed evidence of circulatory collapse. The prognosis was poor. Intercostal block on the left side relieved the pain on that side and resulted in marked improvement. The respiration and circulation returned to normal. Following the block only a small amount of narcotics was required for rest and sleep. The block was repeated on the following day. The patient had an uneventful recovery. It is believed that this patient would have succumbed to bronchopneumonia or circulatory failure unless measures had been instituted to relieve his pain promptly on admission.

One patient with pleurisy from metastatic carcinoma was given relief for 12 consecutive days on two occasions, by using efocaine for the intercostal block. Opiates were not necessary during this time for relief of pain.

Back Pain. Many authors have written of the efficacy of procaine injections in back pain. Travel[3] and Gorrell[4] have emphasized the importance of "trigger zones" in muscles and the relief of spasm resulting from the injection of these trigger zones with procaine. These trigger zones are tender areas varying in size from a pea to an olive and may be either superficial or deep. They seem to be capable of sending out painful stimuli which cause reflex muscle spasm. Since sensory nerve endings have not been demonstrated in muscle, it is probable that they are located in the fascial components. Relief in this condition is usually proportionate to the careful localization of these trigger zones prior to injection. The patient will frequently wince as one of these areas is located and will volunteer the information that pressure on this point reproduces the type of pain which he has been having.

When psychogenic factors and organic lesions have been excluded, "acute back pain" and even some "chronic back pains" will respond rapidly to the injection of a local analgesic drug. In many of these patients physiotherapy immediately after injections is beneficial. Six of the seven back patients treated with injections responded well. The 7th patient had a strong psychogenic overlay and he obtained no permanent relief. He represents a poorly selected patient for this type of treatment.

Case 2. A colored male age 37 admitted Nov. 19, 1951 with severe pain in his back, which came on following lifting a crosstie. The back pain was so excruciating he was afraid to move even an extremity. Examination revealed marked spasm of the lumbodorsal muscles, with pain centered over lumbar segments 4 and 5. X-rays were negative for fracture.

Pontocaine 0.15 per cent solution with hyaluronidase solution was injected bilaterally at lumbar segments 4 and 5. In two minutes the pain was relieved and the patient could turn over in the bed without discomfort. No further blocks were necessary. He was discharged six days after admission free of pain.

Case 3. A colored male age 32 admitted Oct. 31, 1951 with pain in his back. Three days previously he was carrying one-quarter of a beef. He slipped and sprained his back, causing it to be extremely painful.

On examination the lumbodorsal muscles were spastic and there was a markedly tender area at lumbar segments 3 and 4 bilaterally. Motion greatly increased the pain. X-rays were negative for fracture.

A bilateral block of lumbar segments 3 and 4 was done using pontocaine 0.15 per cent solution. About ten minutes after the injection the patient climbed off the table with little discomfort. He was discharged four days later free of pain.

Shoulder Pain. Gorrell[4], Outland and Hanlon[5], Haldeman and Soto-Hall[6], Steinbrocker[7], Lipkin[8], and Travell[9] have cited the value of local analgesic drugs in the therapy of shoulder conditions. There are three possible modes of action. (1) Elimination of trigger zones. (2) The hyperemia resulting from the trauma of the injection of the bursa. (3) Circulatory improvement resulting from increased range of motion after a nerve block has relieved the pain. Milowsky and Rovenstine[10] reported 100 consecutive patients with shoulder pain in which the suprascapular nerve which innervates the shoulder was blocked at the lesser scapular notch. They obtained good results in acute and chronic bursitis and fibrositis but only fair or poor results in conditions such as cervical osteo-arthritis, myositis or the pain of metastatic carcinoma.

We have treated 5 patients in the present series, and all of them obtained relief from pain. Most of them experienced a marked increase in range of motion following the block.

Case 4. A white male age 57, admitted September 6, 1951 with a diagnosis of advanced pulmonary tuberculosis. When first seen February 28, 1952 the patient was sitting on the bed complaining of severe pain in the left shoulder. The onset was 10 days previous. Treatment had been physiotherapy and heat and had been without relief.

On examination there was only 25 per cent motion in the left shoulder. He complained of excruciating pain on the slightest motion. There was a trigger point over the posterolateral surface of the deltoid.

Diagnosis: Subdeltoid bursitis, acute.

Treatment: The left suprascapular nerve was blocked in the lesser suprascapular notch with xylocaine 2 per cent. Pain relief was immediate and most remarkable. Motion of the arm was greatly improved. The patient was seen the next day at which time he stated that he had a good nights sleep, the first in ten nights. There was a recurrence of the pain to a much less degree and he complained of his shoulder being sore. The same "blocking" procedure was done. Physiotherapy with passive and active motion was carried out. At the end of 19 days the patient showed considerable improvement but still had some pain. The suprascapular nerve was again blocked. Five days later the patient was again seen and he stated he was feeling much better. The motion of the shoulder had increased to about 60 per cent. Six weeks after the first injection he was having only slight pain and he had better than 75 per cent motion of the shoulder.

Acute Torticollis. Patients with acute wry neck will receive prompt and gratifying relief either by injecting the spastic muscle or by giving procaine 0.1 per cent solution intravenously.

Case 5. Doctor, age 28, a resident, arrived in the operating room at 8:00 a.m. unable to move his head or to rotate it from side to side. He complained of pain and said his neck was stiff. The onset occurred during the night and was worse on arising in the morning.

Diagnosis of acute torticollis was made. Treatment consisted of administering 290 milligrams of procaine 0.1 per cent solution as a unit dose intravenously over a period of twenty minutes. The patient began moving his head in about ten minutes and at the end of the administration he sat up on the operating table and moved his head in all directions, almost free of discomfort. No further treatment was necessary.

Case 6. A doctor's wife, age 40, had been to the dentist the previous morning. That evening her neck felt a little sore and stiff. On awakening the next morning she could not raise her head off the pillow because of excruciating pain. Procaine 1 per cent was injected along the outer border of the middle of the left sternomastoid muscle. The pain was relieved promptly and the patient went to sleep. After three hours sleep she awakened and was free of pain. No further treatment was necessary.

Ankle Sprains. Ankle sprains offer one of the most fertile fields for procaine therapy. Relief of pain is rapid, motion is increased, immediate disability is corrected, prolonged morbidity is eliminated. We have used this treatment for many years although our present series contains only one case. The result in this particular patient was excellent.

Causalgia. It is not within the scope of this paper to discuss all of the problems of causalgia, however, it is believed by many authors that reflex vascular changes are responsible for many of the symptoms. This reasoning is based on the fact that sympathetic interruptions give symptomatic relief. Mayfield[11] believes that injured and partially divided nerves are the ones responsible for causalgia rather than the completely severed nerve. Pratt[12] emphasized the importance of the vascular component in the production of symptoms due to causalgia, and calls attention to Homan's valuable criteria for sympathectomy in these cases. These are: (1) Relief should be complete for the first period of an effective sympathetic block. (2) Relief should persist over a period of over 2 hours. (3) More prolonged relief should result from the second and subsequent injections. These criteria met, sympathectomy may be considered as a permanent step. In our short series, diagnostic block of the sciatic, ulnar and obturator nerves, and injections of amputation neuromata has been extremely useful in furnishing the basis for definitive surgical treatment.

Coxalgia. Local analgesic drugs injected into the region of the coccyx gave relief in one case of idiopathic coxalgia. This procedure supplemented by sacral block resulted in relief of pain for a period of a month in one of our patients suffering from carcinoma of the rectum with recurrence in the perineal tissues.

Paravertebral Lumbar Sympathetic Blocks. So much has been written on the use of this proced-

ure in acute occlusive vascular disease, in Raynaud's disease, Buergers' disease, arteriosclerotic peripheral vascular disease, causalgia, frost bites, scleraderma, hyperhidrosis, and herpes zoster that discussion is unnecesary. Poppen[13] uses continuous procaine injection in the treatment of thrombosis of the internal carotid artery. Ruben and Kamsler[14] describe the use of continuous lumbar sympathetic block in thrombophlebitis, arterial occlusion and frost bite preliminary to sympathectomy. Our experience has been similar to that of many others who have found paravertebral sympathetic blocks to be useful in evaluating vascular response where sympathectomy is contemplated. In acute occlusive vascular disease we believe that paravertebral sympathetic blocks should be used early. Our results when used late in the course of the disease have been very poor. This procedure in painful, edematous lower extremities following trauma, has resulted in gratifying improvement in our patients.

Supra-orbital Block for Headache. One patient had a severe headache following a head injury. This seemed to originate in the region of distribution of the supra-orbital nerve. Blocking this nerve with procaine gave complete relief. The other patient in our series was one in whom no etiological factor could be found. He was suspected of having a psychogenic component. After blocking with procaine he stated that, "I obtained the first two nights sleep I have had in months". This improvement, however, was temporary.

Stellate Block. Stellate block has been advocated in selected cases of cerebral vascular accident. We used this procedure on eight patients and have not been impressed by the results. These have all been referred by the Medical Service rather late in the course of their disease and it is quite possible that earlier therapy would have given better results.

Smith[15] and others have pointed out that stellate block has a place in the therapy of causalgias, hyperhidrosis, and peripheral vascular disease in the upper extremities. This is comparable to the place of paravertebral lumbar blocks in the lower extremities. No such cases are represented in this series and we do not have sufficient experience for comment.

Vascular Diseases. Siris and Kahn[16] have pointed out that pain itself may provoke angiospasm which in turn causes ischemic pain. If pain can be controlled the element of secondary angiospasm is lessened or abolished. Wolff and Wolf[17] have emphasized the part played by changes in the caliber of the blood vessels in certain types of headache. We have blocked the temporal artery in two cases. Both patients obtained good, temporary relief which became permanent following resection of the artery.

Case 7. Male patient, age 40, admitted Oct. 29, 1951 for headaches following a head injury several months before. He required narcotics for episodes of severe headache. A procaine 1 per cent injection in the region of the left temporal artery gave prompt relief, and confirmed the diagnosis of left temporal arteritis. Resection of a segment of the temporal artery gave permanent relief.

Intravenous Procaine. Intravenous procaine has been used both to relieve pain and for the treatment of cardiac irregularities. According to Graubard and Peterson[18] its effectiveness in the pathologic state is based on the permeability of the capillary membrane to colloids as well as to ions, permitting a concentration of 7 to 8 times as much of the drug in traumatized tissues as in normal tissues. Steinberg[19] could find no evidence of any toxic effect on the liver as manifested by the cephalin flocculation test. Grittain[20] reports on the use of intravenous procaine to control postoperative pain in 100 consecutive patients, and 90 per cent of his patients were pain-free for 12-24 hours. Moderate tachycardia and skin flushing, occurring in a few of these patients, were promptly controlled by slowing the rate of the drip. We have used procaine for this purpose in several patients and while the results were satisfactory, it does not seem to us to offer any great routine advantage over the narcotics, because supervision is necessary during the period of intravenous administration.

Intravenous procaine has an important place in the control of cardiac arrhythmias occurring during anesthesia. Burstein[21] used continuous electrocardiac tracings in his study of cardiac arrhythmias during the course of general anesthesia and found that irregularities occured in 80 per cent of his cases. It has been established that a concentration of procaine of 0.1 per cent or 0.2 per cent is safe and effective when given intravenously for irregularities of the heart.

We have found this drug particularly useful in chest operations involving work near the heart. Regular rhythm has been promptly restored in the cases in which have had occasion to use this form of medication.

The Merits of the Analgesic Drugs Used. The relative merits of procaine, pontocaine, xylocaine and efocaine are fairly well established. While xylocaine and efocaine are comparatively new, procaine and pontocaine are familiar to every physician and surgeon. Procaine, which has been in use for fifty years, has the advantage of being less toxic than the other agents and is used as a standard by which the others are compared. Procaine, or novocain, is generally used in a one-half to a two per cent concentration and a one gram single dose must be adhered to as the safe maximum dosage. The main disadvantage of procaine is the short duration of its action. To overcome this a vasopressor drug such as epinephrin or adrenalin may be added—in the proportion of 1:50,000 to 1:100,000. However, this presents a definite disadvantage because the effect of epinephrine on the heart is often undesirable.

There has been a constant effort to find other analgesic drugs which have a more lasting action. One answer to this has been the introduction of pontocaine hydrochloride which has a prolonged activity of about 30 per cent over that of procaine. Pontocaine while more potent is ten times more toxic than procaine so that in order to make it safe the strength of the solution used is 0.1 per cent to 0.2 per cent.

Therefore, by using one tenth as much pontocaine as procaine—good analgesia is obtained and at the time a prolongation of 30 per cent in action is expected.

Further efforts have produced xylocaine and efocaine, both comparatively new drugs. However, extensive use of these two drugs is proving them to have considerable advantage over procaine and pontocaine when they are used in selected procedures.

Xylocaine has about the same relative toxic properties as procaine or pontocaine. The longevity of action is about the same as pontocaine and it can also be used with or without a vasopressor drug. The main and most desirable property of xylocaine is that its onset of action is more rapid than procaine or pontocaine and its diffusability is much more extensive. Consequently a much smaller volume of solution will produce a more positive and effective field of action.

More recently efocaine was introduced into the field of local analgesics because of its exceedingly prolonged action. Efocaine is procaine and butyl-p-aminobenzoate which are crystalin substances dissolved in polyethylene glycol and propylene glycol. These crystalin substances are slowly soluble while the solvent is quickly removed by the tissue fluids leaving the crystals to be slowly absorbed, therefore prolonging their action. The toxicity of efocaine is not established but it stands to reason that since the drug is absorbed very slowly, the toxicity should be very low.

Efocaine is applicable to all procedures where a very prolonged action is desirable. We have obtained 10 to 14 days relief of pain in several cases where nerve blocks were done. The drug must be spread thin in the tissues and a special effort made to avoid pooling for the best results.

No untoward reactions from the use of any of these drugs occurred in our series.

SUMMARY. The role of four local anesthetic agents in diagnostic and therapeutic procedures has been discussed from the standpoint of their practical use in the hands of the general practitioner. Relief of pain, increase in function, and decreased morbidity are shown to result in properly selected cases.

Illustrative cases were selected from the 62 patients treated over a period of 9 months.

BIBLIOGRAPHY

1. Procaine in Athletic Injuries—Editorial, J.A.M.A., 148: 1423, (Apr. 19) 1952.
2. Gorrell, Ralph: Procaine Injection Therapy of Painful Conditions—Selection of Patients, Am. J. Surg., 82:413-415, (Oct.) 1951.
3. Travell, J.: Management of Pain Due to Muscle Spasm, New York State J. Med. 45 part, 2:2085-2097, (Oct. 1) 1945.
4. Gorrell, R. L.: Musculofascial Pain, Treatment by Local Injection of Analgesic Drugs, J.A.M.A. 142:557-561, (Feb. 25) 1950.
5. Outland, Tom, and Hanlon, C. R.: The Use of Procaine Hydrochloride as a Therapeutic Agent, J.A.M.A., 114:1330-1333, (Apr. 6) 1940.
6. Haldeman, K. O., and Soto-Hall, R.: Injuries to Muscles and Tendons, J.A.M.A. 104:2319-2324, (Feb. 29) 1935.
7. Steinbrocker, Otto: Analgesic Injections for the Intractable Non-Surgical Shoulder, J.A.M.A., 115:2025, (Dec. 7) 1941.
8. Lipkin, Ezra: Discussion of paper in J.A.M.A., 115: 2026, (Dec. 7) 1940.
9. Travell, Janet: Treatment of Painful Disorders of Skeletal Muscle, New York State J. Med., Part 2, 48:2050-2059, (Sept. 15) 1948.
10. Milowsky, J., and Rovenstine, E. A.: Suprascapular Nerve Block: Evaluation in the Therapy of Shoulder Pain, Anesthesiology 10:76-81, (Jan.) 1949.
11. Mayfield: Causalgia, Unpublished paper, 1952.
12. Pratt, Gerald H.: Surgical Management of Peripheral Vascular Diseases, Philadelphia, Lea & Fabiger, 1949.
13. Poppen, James L.: Unpublished paper, 1952.
14. Ruben, J. Eugene, and Kamsler, Patricia-Mary: Continuous Lumbar Sympathetic Block, Anesthesiology 10:92-100, (Jan.) 1949.
15. Smith, Donald W.: Stellate Ganglion Block, Am. J. Surg. 82:344-348, (Sept.) 1951.
16. Siris, J. H., and Kahn, J. W.: Management of Intractable Pain in Peripheral Vascular Disease, Am. J. Surg. 82: 260-262, Aug. 1951.
17. Wolff, H. G., and Wolf, S.: Pain. Charles C Thomas, Publisher, 1948.
18. Graubard, D. J., and Peterson, M. D.: The Therapeutic Uses of Intravenous Procaine, Anesthesiology 10:175-187, (Mar.) 1949.
19. Steinberg, B. L.: Intravenous Procaine: Its Effect on Liver Function in Man as Determined by the Cephalin Flocculation Test, Anesthesiology 10:739-742, (Nov.) 1949.
20. Grittain, G. J.: Intravenous Procaine Hydrochloride, Anesthesiology 4:30-33, (Jan.) 1949.
21. Burstein, C. L.: The Utility of Intravenous Procaine in the Anesthetic Management of Cardiac Disturbances, Anesthesiology 10:133-144, (Mar.) 1949.

HYSTERECTOMY *for Uncontrollable* POSTPARTUM HEMORRHAGE

WALTER W. DANIEL, M.D.*, Atlanta

Obstetrical cases in which the usual measures are ineffective in preventing or arresting severe bleeding, are happily rare. Hunt[1] saw only eight such emergencies in 5,260 deliveries during a decade at the Mayo maternity clinic—one due to fibroid, four to rupture, and two to abruptio, and

From the Department of Obstetrics and Gynecology, Crawford W. Long Memorial Hospital, Atlanta.
*Deceased.

one to previa. In these, hysterectomy was performed without maternal mortality and with four fetal deaths. He believes that because hysterectomy is so seldom necessary, it is often delayed or not considered in this type of hemorrhage. Fortunately, most of the patients in which it occurs are multiparas; but regardless of the existence of children, he points out, it is the physician's duty to give the women the chance of survival which hysterectomy affords.

Hemorrhage is generally classed as the leading cause of puerperal mortality. Gordon[2] declares it is far more common everywhere than is indicated by statistical frequency—an opinion held by most obstetricians—and that there are no preventive measures which can be clearly outlined.

The pertinent literature is extremely scanty, and appears to record no case history or description of uncontrollable postpartum bleeding in which the direct cause was the severe mechanical strain imposed on the uterine muscles by the passage of an exceptionally large baby, with a consequent atony of the uterus. However, Hamilton[3] does mention over-distention of the uterus as a possible cause of postpartum bleeding. In the case here described it was evidently the overdistention of the uterus and difficult labor which produced a functional fatigue of the musculature of the organ and the resulting massive bleeding.

REPORT OF CASE

Mrs. M., aged 27, Gr. 2, P. 1. Her previous delivery was normal and spontaneous after 12 hours labor, the baby weighing 7 lbs. 6 ozs.

Present pregnancy: L. M. P. Oct. 10, 1950. Kahn negative, RH positive, Blood Group A, R. B. C. 3,700,000, W. B. C. 9,500, Hemoglobin 72.9 per cent, Urine negative.

Time Record of Progress

Hospital admission: R.B.C. 4,100,000, Hemoglobin 83.2 per cent.

2 A. M. Membranes intact, slight bloody show, early labor. Dilatation 0, Effacement 0, Station minus 4, Position L.O.A.

3:05 A. M. Demerol, 100 mg. intramuscularly. Dilatation 2 cm., Effacement 50 per cent, Station minus 4.

4:05 A. M. Nembutal, 2 grains, scopolamine, 1/200 grain. Dilatation 3 cm., Effacement 75 per cent, Station minus 2. Pains at 2 to 3 minute intervals.

5:30 A. M. Nembutal, 2 grains, scopolamine, 1/200 grain. Dilatation 4 cm., Effacement 75 per cent, Station minus 2.

5:40 A. M. Pitocin 1 m. intramuscularly, Dilatation 6 cm., Effacement 75 per cent, Station minus 1.

6:00 A. M. Dilatation 8 cm., Effacement 80 per cent, Station plus 1.

6:07 A. M. Delivery N.S.D. Male 9 lbs., 8½ ozs., 20 inches long 2° laceration. Bleeding about 400 cc.

6:10 A. M. Placenta delivered intact. Ergotrate, 1/320 grain was given intravenously.

6:15 A. M. Bleeding excessive. Pituitrin, 1 cc. intramuscularly.

6:30 A. M. Uterus packed: bleeding stopped.

7:00 A. M. Bleeding through pack. One unit plasma with 1 cc. pitocin.

7:15 A. M. 500 cc. whole blood with 1 cc. pitocin. 500 cc. blood followed by 1,000 cc. 5 per cent glucose solution. 10 cc. calcium gluconate.

7:30 A. M. Packing expelled by fundal pressure. Excessive bleeding returned. Uterus reexplored—no tear found, but an area in lower segment felt like an incomplete tear. Tight pack reinserted, but bleeding while slowed, continued through pack. Total blood loss judged to exceed 2,000 cc. 500 cc. blood, 250 cc. plasma, 500 cc. blood.

8:30 A. M. No blood pressure or pulse. Patient in shock, despite blood running into both arms.

9:00 A. M. Supracervical hysterectomy, completed at 9:30 A. M. Some contusion of left tube and ovary found, and these organs removed. No blood present in abdominal cavity. No gross change apparent in uterus.

Pathologist's report: Uterus symmetrical; weighs 810 Gm.; dimensions 15x13x6½ cm. Opened prior to receipt by laboratory, revealing a shaggy endometrium and what appears to be the placental site situated on posterior wall. Myometrium thick and boggy, averaging 3.5 cm. in width. Three blocks.

Left Fallopian tube extends 15 cm. in length and averages 0.5 cm. in width. Presents no abnormality. One block.

Left ovary has dimensions of 5.5 x 2.2 x 1 cm. Within its substance several very tiny cysts filled with clear watery fluid; largest measures no more than 3 mm. in diameter.

Microscopic examination: Five sections. Uterine wall shows the characteristic loosely textured structure of postpartum uterus, with some decidua reaction persisting. Pathogenesis of the postpartum hemorrhage not evident morphologically. Section of ovary shows no significant alteration. Segment of Fallopian tube likewise free from significant abnormality.

Pathologic Diagnosis—Postpartum Uterus.

The patient made an uneventful recovery and was discharged May 15, 1951, eight days after admission to the hospital.

It has been suggested in the literature that the anatomic cause of postpartum hemorrhage in atony of the uterus may be a marked hyperplasia of the decidua spongiosa which has infiltrated the uterine musculature. The pathologist's findings, however, indicate that this theory does not hold good for the present case.

The absence of blood in the peritoneum at operation demonstrated that the postpartum hemorrhage was not caused by a laceration of the uterus.

Accordingly, the cause of the uterine atony, with consequent massive hemorrhage, was apparently the muscular exhaustion following the hard labor which was incident to the passage of the unusually large baby. Removal of the uterus was imperative to avoid total exsanguination.

REFERENCES

1. Hunt, A. B.: Am. J. Obst. & Gynec. 49:246, 1945.
2. Gordon, C. A.: Am. J. Obst. & Gynec. 46:366, 1943.
3. Hamilton, H. J.: J. Missouri M. A. 45:647 (Nov.) 1948.

Clinical Conference

All North Georgia counties were represented at a Clinical Conference conducted at the Coosa Country Club, Rome, on May 28 by the staff of the Harbin Clinic. Following the afternoon clinical program the guests enjoyed a social hour and dinner.

The scientific program consisted of: "Laryngectomy," a motion picture in color, Dr. A. V. Gafford; "Management of Hypertension," Dr. William Harbin; "Endoscopic Surgery of the Prostate," Dr. Robert Harbin; "Experiences with Nitrogen Mustard Treatment," Dr. Ed Bosworth, and "Subtotal Gastrectomy" (illustrated), Dr. Lester Harbin.

Special Articles

C. JOSEPH STETLER, Chicago, Ill.

Medical CIVIL DEFENSE Activities of the AMERICAN MEDICAL ASSOCIATION

It is not my intention or my purpose in the time allotted to me to discuss either the basic philosophy of civil defense or the critical international situation which indicates the necessity for accepting that philosophy. Instead, I want to review briefly the interest and activities of the various national health associations in medical civil defense affairs and to comment specifically on your local program.

Undoubtedly, there are many people here today who have but scant knowledge of the interest that the American Medical Association and its component state and county organizations have in civil defense. For that reason and since the extent of that interest and the activities that have flowed from it are of prime importance in the business of this meeting, a brief recital of events and an outline of the present state of readiness of the medical profession seems to be in order.

In 1947, following an exhaustive survey of the activities of the physicians of America during World War II, the House of Delegates and the Board of Trustees of the American Medical Association established a Council on National Emergency Medical Service.

Almost from the beginning, civil defense has been one of the Council's prime interests. To project its influence into the profession at state level, it urged the component state medical societies to establish committees similarly charged with a special interest in the problem of medical service in the event of emergency. Today every state with one exception has such a committee.

The next action of the Council in its efforts to help get civil defense rolling was to invite the chairmen of these state committees to a meeting in Chicago, where, with the aid of experts, they were oriented in certain of the strictly medical aspects of atomic, biological and chemical warfare. They were urged at once to begin the integration of their medical interests with all of the other major phases of a complete civil defense program. Their first job was to make certain that two things happened in their home states: First, that civil defense enabling legislation be enacted as soon as possible, and second, that a civil defense administrator and a health deputy be appointed.

Then came the program of interesting and informing the rank and file of the profession, beginning with the film "They Also Serve," continuing with countless special articles, pamphlets, training courses and editorials and extending even through personal contacts at regional meetings around the country.

A series of feature articles, which have appeared periodically in The Journal of the American Medical Association on the major medical aspects of civilian disaster, is now being reproduced in booklet form.

In all of these efforts the Council has worked closely with Dr. Wilson and Dr. Kiefer in the Federal Civil Defense Administration where we enjoy a most friendly working relationship and where our

Address presented by C. Joseph Stetler, Secretary of the Council on National Emergency Medical Service of the American Medical Association, at the Annual Session of the Medical Association of Georgia, May 13, 1952.

proposals always receive serious and intelligent consideration.

In November 1951 a National Medical Civil Defense Conference was sponsored jointly by the American Medical Association, the American Hospital Association and the Association of State and Territorial Health Officers. The fundamental purpose of that meeting was to amalgamate the interest and purpose of the physician, the hospital administrator and the health officer in every state, county, city and town to the end that the health aspects of civil defense would be expeditiously and fully developed.

It was probably at that meeting that many of the participants and even our Council realized fully for the first time how essential it was to drastically upgrade and to bring into our plans the other health professions. Although we have always worked with the national associations of the nurses, dentists, veterinarians and hospitals, we have really gotten down to some joint planning since that conference.

The American Dental Association has, within the past six months, set up a subcommittee on civil defense. This group met with our Council at its last meeting on April 27 and submitted for our consideration a five point program, outlining the things which they believe must be accomplished in order to attain the maximum utilization of the dental profession in time of emergency. I would like to pass them on to you.

1. The appointment of a dentist to state civil defense health service committees;
2. The approval of a program for enrolling and training dentists in state programs. (A proposed training program was also submitted; I have a copy of that program with me today.)
3. Participation in future medical civil defense conferences sponsored by the American Medical Association;
4. The appointment in each regional office of the Federal Civil Defense Administration of a dentist on a full or part-time basis as director of dental activities; and
5. (a) The urging of medical personnel to be available to train dentists in emergency medical casualty care, (b) the encouraging of hospitals to permit dentists who have had such training to visit the emergency wards as observers, and (a) the giving of first-aid training to all medical and dental students.

With respect to this latter point, it was decided at a meeting of the Committee on R.O.T.C. held in Chicago on April 10, that a series of pilot programs would be sponsored by the Department of the Army under which practical courses in military medicine and emergency medical and surgical care would be included in the curriculum of selected medical schools. Medical schools at Vanderbilt, Buffalo, Cornell, California and Illinois were selected to initiate the program.

In referring to the ancillary health professions, I should like to report that our Council has worked closely with and has been impressed by the willingness and cooperative attitude of the veterinary profession.

We feel that veterinarians could be used to advantage in medical first aid work in an acute emergency following an atomic or chemical attack. Also that small animal hospitals could be utilized for first aid stations and temporary hospitals because of the equipment and supplies normally maintained there and because they are quite commonly located on the fringe of heavily populated areas.

Representatives of the national veterinary association have told us, however, that they believe their primary civil defense responsibility is the detection and control of any attempt at biological warfare against food producing animals. When one stops to consider how important the foods of animal origin are to the human diet and to the nation's morale, biological warfare of this type certainly seems well within the realm of possibility. Another noteworthy consideration is that animal biological warfare would not have to await the formal declaration of war—it could be employed by saboteurs at any time.

At our last Council meeting we received an extremely interesting report on this very point from Dr. Van Houweling, who is Assistant Secretary of the American Veterinary Medical Association. It seems that in the past year there has been an unusual occurrence of anthrax in the United States. In Ohio, for example, there had been only two cases in the history of the state prior to 1951. In one week in February of 1951, 17 cases were reported. Since then, a total of 240 farms in 55 counties have been quarantined.

In Illinois there were only four cases prior to September 1951. However, there were 44 cases in March of this year and there have been 25 cases reported up to April 21.

All of these cases have been traced to heavily contaminated bone meal imported from Belgium from whom we have been importing bone meals for years without incident. Although Dr. Van Houweling did not label this as biological warfare, he did indicate that it certainly was a possibility.

Now then, in the few minutes remaining to me I should like to discuss some of the aspects of your local civil defense medical program.

In May of 1949 the Medical Association of Georgia appointed a Civilian Preparedness Committee under the chairmanship of Dr. Dunstan. Fortunately for Georgia, it did not take a conference such as the one we held last November to unify the efforts of the state health office and the medical society. Thus benefitted by a history of mutual trust and cooperation, it is understandable that it has been possible to expeditiously produce a sound and workable medical civil defense plan.

But before I mention the plan, let me say that I have read your Civil Defense Act and generally it seems like a good one. I have not studied it carefully but it appears to me that, although the definition of civil defense contained in the Act includes domestic disasters, the Governor's emergency powers are limited to situations involving an enemy attack. I do not know how this has been interpreted but if it will not permit the state civil defense organization to function in time of a domestic disaster, consideration of an amendment to the Act would seem to be in order.

A sound civil defense program calls for three things: public interest, proper planning and energetic

action. The first element has not been attained. However, I am confident that in Georgia, at least, its realization is assured. I say this because I believe public interest will develop if the other two conditions are met.

I have reviewed and studied your state medical civil defense plan and although I am no expert, I consider it to be exceptionally good. Certain aspects seem to me to be particularly worthy of note. First of all, your state plan is uniform for target and nontarget areas, thereby facilitating and insuring mutual aid and training.

In your Self Help and Neighbor Help program you have wisely selected schools as sites for improvised hospitals—you have used school districts for operational purposes—and for organization and staff you are using the teachers and the Parent-Teachers Association. The manual just completed, which spells out the method of converting a public school into a temporary improvised hospital, is excellent.

In the Professional and Technical Assistance phase of your plan, you have brought in hospitals very effectively. This, of course, is not strange since Dr. Dunstan, being a former hospital administrator, knows full well the role that hospitals must play in any effective civil defense medical plan.

I was happy to see that you are also using the Woman's Auxiliary of your medical society and your medical students so effectively. It is my personal opinion that these are invaluable sources of assistance which have been overlooked in many states.

Finally, you have not neglected one of the greatest necessities in proper civil defense planning—that is, the negotiation of interstate mutual assistance compacts. This is attested to by the fact that part of your program for tomorrow is dedicated to the coordination of interstate programs.

Civil Defense, as the slogan goes, is everybody's business. But human nature is such that it is the exceptional citizen who is prudent enough to tend to that business. For the medical profession, therefore, civil defense imposes a dual responsibility. Not only must the individual physician acquaint himself with his local medical plans and enter wholeheartedly into their implementation but it is also his responsibility to lend a hand in breaking the deadlock of public apathy.

The medical profession has at times been criticized for a reluctance among its members to participate in public affairs. This criticism certainly cannot be leveled at your medical civil defense leaders. They have truly distinguished themselves in this important realm of public affairs now neglected by so many. The people of Georgia owe them a debt of gratitude and some day may well owe their lives to their foresightedness and untiring efforts.

These men have set aside the first Monday in June as the goal for completion of the assignment of physicians to local Civil Defense Volunteer Medical Service Corps. Significantly, this is also the day for the first monthly meeting of the Georgia Civil Defense Health Service School which will initiate an extensive joint training program.

Now, therefore, is the time for individual action, for despite what has been done to date, it will all be futile unless the medical profession as a whole becomes civil defense conscious. What would the degree of professional efficiency be if you were confronted tomorrow with an atomic attack or a statewide domestic disaster? Would medical care be systematically available? Would the average physician know where to report and what his responsibilities really were? Unless these questions can be answered in the affirmative, YOUR job in this tremendous effort is far from complete.

Presentation of the President's Gold Key to

WILLIAM FARRELL REAVIS, M. D.

W. A. SELMAN, M.D., Atlanta

A great philosopher, in summing up the life history of the human race, once expressed it thus—"A heap of dust, a gust of wind, and where is man". Were posterity to depend upon what Dr. William Farrell Reavis says of his own accomplishments, it could be summed up in some such terse epigram. What a Georgia doctor, noted for his modesty, has accomplished could never be obtained by asking him. However, ask his friends, his schoolmates, and his fellow physicians, they will tell you that his merry laugh could be heard above the din of recess, and his scholastic record was one of steady progress. Ask his college mates, and this is where I

Read before the Medical Association of Georgia in Annual Session, Atlanta, May 12, 1952.

can vouch for its verity. He could pitch a quarter across the room, and make it stick on the crack-a-loo line, just like it had lode-stone in it! He had the reputation of seeing a pretty girl farther than any of his classmates and seeing her, he never looked the other way!

Dr. Reavis was graduated from Emory University School of Medicine in 1911, and went to Waycross, Georgia to begin his medical practice. For a close-up, let us go to Waycross and see what his fellow citizens think of him. One young lady, a belle of Ware County, Miss Olive Gladys Parker thought well enough of him to become his wife, and their home has been blessed with six children. His fellow citizens elected him the first President of the Rotary Club of Waycross. He is a member of the Masons, the Elks, the Woodmen of the World and the Methodist Church. Though he does not speak of it boastingly, he is a Democrat!

What his Ware County and Eighth District Medical Societies think of Dr. Reavis, may be gleaned from their actions. They elected him a delegate to the Medical Association of Georgia for thirty continuous years; President of the Ware County Medical Society; and the Eighth District Medical Society. He is a member of the Georgia Urological Society, and a Fellow of the American Medical Association.

Now, what does the Medical Association of Georgia think of this "Heap of Dust"? It feels honored to have had him as its President for the past year, and as its representative, I have the honor, to present you, Dr. Reavis, with this gold key—a token of our love and appreciation.

D. L. WOOD, M.D., Dalton

The Use of HORMONES *in the Treatment of* BREAST CARCINOMA

The Committee on Research of the AMA has set up a coordinated program to study the effects of hormone therapy in advanced cancer. Most of the work up to this time has been done in the field of breast, cervix, and prostate cancer. This paper will deal chiefly with the treatment of advanced cancer of the breast, or cancer that is beyond hope of cure by surgery and irradiation.

Since breast tissue responds to stimulation of estrogens, progesterone and testosterone, it is plausible that carcinoma arising from breast tissue will be affected by these agents. Some definite patterns have been established by the Research Committee as follows:

1. Advanced cancer in premenopausal period and until about five years postmenopausal is best treated by radiation, surgical castration, or testosterone.

2. After the menopause, x-ray therapy may be used in suitable cases, and in some instances combined with surgery or estrogens, or testosterone.

To go back to the premenopausal patients, x-ray and surgery in suitable lesions should always be used. Surgical castration in many instances gives rather dramatic relief for varying periods. After this effect is lost testosterone therapy should be instituted and carried on until it produces no effect, then estrogens may be tried. In some patients, if long enough after castration, estrogens may give beneficial results in prolonging life.

3. In postmenopausal cancer estrogens produce the greatest benefit. Soft tissue lesions heal over and decrease in size, sometimes to the point of almost completely disappearing. Biopsy and microscopic examination of these give a picture resembling the changes seen following intense irradiation. This may be the reason that it is quite dangerous to irradiate a lesion after estrogen therapy has been used, as they will slough. All of this does not mean that estrogens have caused a cure, because viable cancer cells can be found in these metastases.

In metastases to bone, androgens act more promptly and give quicker symptomatic relief than do the estrogens. At first estrogens were thought to be ineffective in these lesions, but as treatment is prolonged it is found that estrogens produce healing of the bony lesions, but do not give as much relief from pain as the androgens. However estrogens seem to be definitely superior to androgens in causing regression of pleural and lung metastasis. In patients

Read before the Spring Meeting of the Seventh District Medical Society, Dalton, April 23, 1952.

where beneficial effects are obtained, cough and dyspnea are promptly relieved to a marked degree.

In both the pre- and postmenopausal patients hormone therapy seems to be less effective if irradiation has been previously used. None of the androgens or estrogens seem to be any more effective than the other. The influence of treatment must always be considered as a function of time dose relationship. The effective dosage schedule of testosterone proprionate appears to be 50 mg. given intramuscularly three times weekly, and the minimum length of therapy should be three months before concluding that a patient will not respond.

The minimum dose of diethylstilbestrol, dienestrol, premarin, and dimethyl ether of diethylstilbestrol appears to be about 4 gm., and the minimum duration of therapy three to six months. Side effects of androgens are: hirsutism, deepening of voice tone, edema, acne and increased libido.

Hypercalcemia occurring while under treatment with estrogens and androgens is probably a coincidental finding, since patients with breast cancer and bone metastases not undergoing treatment may develop hypercalcemia sponstaneously. This is probably due to a change in the character of the bone lesions from an osteoblastic to an osteoclastic process. Nevertheless the hormones may be responsible and on appearance of hypercalcemia they should be discontinued.

Side effects of the estrogen therapy includes severe uterine bleeding which may require curetage. With prolongd bleeding the possibility of endometrial carcinoma or activation of fibroids must be considered. Bleeding is to be expected when estrogen treatment is discontinued and progresterone may be useful in this instance.

Progesterone produces much the same side effects as estrogens, and the usual dosage is 100 mg. I. M. daily. The optimum dosage of stilbestrol seems to be 15 mg. given daily, but dosages up to 300 mg. daily have been used experimentally in some cases of hypertrophy of the prostate and in very far advanced cervical carcinomas. After improvement ceases with hormone therapy, cessation of use of the drug sometimes produces improvement in the condition. Later the opposite hormone may give further beneficial results.

Let us hope that further research and investigation of the hormones will either find the answer as to the cause of cancer, and include a method of prevention, or some method of cure in the late cases.

PHARMACISTS' PRAYER

The invocation which follows was given by the Rev. Jack Anderson, pastor of Wesley Monumental Methodist Church, Savannah at the sessions of the Georgia Pharmaceutical Association in Savannah on April 29:

We thank Thee, O God, for the wonder drugs which we have discovered to cure our bodies and the powerful stimulants thou hast given to quicken the function of our organs. We pray Thee that we may discover and use the alchemy of the soul. Help us to see that faith is more than a pleasant ointment or soothing salve for our frustrations. Help us to see that faith is more than a sedative to numb our emotions so we can function in a neurotic world. Help us to see that prayer is more than a capsule to fortify us in the critical periods of life. Help us to discover that love is as essential to our life as oxygen is necessary to the body. Thou who didst create us and make us to be like Thee, breathe into our listless souls and anemic spirits and make us living and breathing spirits again so that we may be able to love each other and worship Thee.

The Association

Meeting of the

EXECUTIVE COMMITTEE

of the MAG

Academy of Medicine, Atlanta

May 25, 1952

Present were Drs. H. D. Allen, C. F. Holton, W. Bruce Schaefer, William P. Harbin, Jr. and David Henry Poer.

The following action was taken:

1. Named Dr. H. D. Allen as permanent chairman of the Council Executive Committee.

2. Heard Chairman Stephen T. Brown of the Public Relations Committee outline his tentative public relations program for the Association for the year 1952-1953.

3. Approved for presentation to the Council at its next regular meeting the proposal for establishment of an Interprofessional Council as presented by Mr. Felton Gordon of Atlanta, executive secretary of the Georgia Optometric Association. Such a Council would be composed of key representatives from the medical, dental, osteopathic, optometric, veterinary, nursing, pharmaceutical and related professions of the state.

4. Conferred with Dr. Charles Eberhart of Atlanta who represented the National Doctors Committee for Improved Federal Medical Services and who explained the Committee's work for passage of Senate Bill 1140, legislation designed to coordinate the 35 competing federal medical systems in accordance with the Hoover Commission's recommendations. Dr. Eberhart outlined current opposition to the bill by the American Medical Association and stated that it was the national committee's desire to have state medical associations petition AMA to present amendments to the bill which would eliminate its opposition to the legislation. The Council Executive Committee, as such, agreed to make such recommendation to Dr. George F. Lull, AMA Secretary.

5. Approved Secretary Poer's plan to reorganize the Association headquarters office activity which includes (1) the hiring of a lay field secretary and (2) the assignment of Miss Viola Berry to executive editorship and business manager of the *Journal.*

6. Designated that certificates of appreciation be drawn up for presentation at the 1953 Annual Session to certain members having rendered outstanding service to the Association in past years.

7. Appointed an advisory board to cooperate with the Georgia Society for Crippled Children comprised of Drs. H. Walker Jernigan, Atlanta; William C. Cook, Columbus; Ruth Waring, Savannah; Peter B. Wright, Augusta, and Ralph Fowler, Marietta.

8. Authorized travel expense of $200 each for AMA Delegates Eustace A. Allen and C. H. Richardson for attendance at the AMA Chicago Session, June 9-13, 1952. Travel and other expense for attendance thereat was also authorized Mr. Sid Wrightsman, Jr., Executive Secretary.

News and Information

SOCIETIES

First District Medical Society at its summer meeting on May 24 at the Oglethorpe Hotel, Savannah, elected as its officers for the next year: Drs. John A. Mooney, Statesboro, president-elect; John Elliott, Savannah, vice-president, and William H. Fulmer, Savannah, secretary-treasurer. Dr. Sam Rosen, the 1951-52 president-elect, succeeded Dr. Bird Daniel as president.

The following appointments were made: Drs. Lee Howard, Sr., councilor; Charles T. Brown, vice-councilor; John Elliott, to the insurance and economics committee and the public policy and legislation committee; J. Miller Byne, Jr., to the public health committee, and Lee Howard, to the public relations committee.

At the meeting, held in conjunction with that of the First District Heart Association, a new constitution was adopted. It was decided that the fall meeting will be held in Statesboro and the spring meeting in Savannah in connection with a meeting of the Georgia Medical Society. About 30 physicians were present for the May meeting.

The scientific program consisted of an address on "Hypertension" by Dr. Ed. Orgain, professor of cardiology at Duke University; an address on "Use and Misuse of Digitalis" by Dr. Harry T. Harper, professor of cardiology at the Medical College of Georgia; and a panel discussion on "Cardiovascular Diseases," with Drs. Orgain, Harper, T. L. Ross, Jr., of Macon, and J. C. Metts, of Savannah, as participants.

Eighth District Medical Society held its semiannual meeting on April 8 at the Douglas Golf Club, Douglas, with about 45 members present. Host to the group was the Coffee County Medical Society. Dr. Lovick W. Pierce, Waycross, district president, presided.

The scientific program consisted of an address by Dr. C. F. Holton, Savannah, then president-elect of the MAG, and the following papers: "Fractures of the Femur—Use of Intermedullary Pin," Dr. Dan A. Jardine, Douglas; "Radiation Therapy," Dr. Neil F. Yeomans, Waycross; "Treatment of Massive Gastro-Intestinal Hemorrhage with Banthine," Dr. Van B. Bennett, Valdosta, and "Peripheral Vascular Disease," Dr. W. H. Perkins, Jesup.

Afterwards, the members of the society and of its Woman's Auxiliary enjoyed a social hour and dinner.

Ninth District Medical Society elected Dr. Paul T. Scoggins, of Commerce, as its new president at its meeting held April 16 in the Civic Building in Gainesville. Drs. Eugene Ward and Hartwell Joiner, both of Gainesville, were elected vice-president and secretary-treasurer, respectively, of the society. The group will hold its next meeting in Commerce in September.

Bibb County Medical Society held its monthly meeting at the State Health Department Building in Macon on May 6 and heard an address by Dr. Walter Barnes, of Macon, on, "Medial Torsion of the Tibia."

Ware County Medical Society on May 1 held a meeting and outing at Crooked River Club as the guests of Dr. and Mrs. R. R. McCollum, of Kingsland. Before supper was served, fishing and other outdoor pastimes were enjoyed by the physicians and their wives.

AUXILIARY

Richmond County Auxiliary installed in May as its officers for the coming year: Mrs. William S. Boyd, president; Mrs. Stewart Flanagin, first vice-president; Mrs. Harry B. O'Rear, second vice-president; Mrs. Richard Torpin, third vice-president; Mrs. Gordon M. Kelly, recording secretary; Mrs. John Emile Hummel, treasurer, and Mrs. Walter L. Shepeard, historian.

These officers were elected at a meeting held April 22 at the Partridge Inn, Augusta. At that time the group named as delegates and alternates to the state convention in May Mrs. Stephen Brown, 1951-1952 president of the Richmond Auxiliary, Mrs. W. S. Boyd, Mrs. C. H. Willis, Jr., and Mrs. M. H. Wylie.

PERSONALS

Dr. V. L. Bryant has been appointed Central of Georgia Railway company surgeon for Wadley, succeeding the late Dr. J. D. Peacock. Dr. Bryant formerly was company surgeon for Bartow.

Dr. John D. Campbell, of Atlanta, delivered a paper entitled, "Manic-Depressive Psychosis in Children—Report of 18 Cases" to the American Society of Biological Psychiatry at Atlantic, City, N. J., on May 11.

Dr. and Mrs. W. A. Chapman, of Cedartown, celebrated their 62nd wedding anniversary on April 30, at which time they were honored at a round of informal parties.

Dr. Harry L. Cheves, of Union Point, has been accredited as a senior fellow of the Southeastern Surgical Congress.

Dr. Grady Coker, of Canton, addressed the Rotary Club of his city in April on cancer and the operations of the American Cancer Society.

Dr. James B. Craig, who has been practicing neuropsychiatry in Savannah since 1946, has accepted a position as associate professor of psychiatry at the Ohio State University medical school and assistant medical director of Columbus Receiving Hospital, the psychiatric institute for Ohio State. He will report for duty there on July 1.

Dr. Rupert Fike, of Moultrie, made a humorous talk on April 23 to the Valdosta Rotary Club.

Dr. Glenville A. Giddings, of Atlanta, is engaged to be married in July to Miss Sara Latimer Clay, also of Atlanta.

Dr. Hugh A. Goodwin, Jr., of Summerville, has been appointed chairman of the medical advisory committee for Chattooga County's Red Cross blood program.

Dr. J. E. Griffith, Rockmart, has been named plant physician at the Lockheed Medical Center, Marietta. He succeeded Dr. E. A. Musarra, who resigned the office to return to private practice in Marietta.

Dr. W. D. Hall, of Calhoun, has been notified that he will be certified this fall as a fellow of the International College of Physicians and Surgeons.

Dr. H. B. Jenkins, of Donalsonville, addressed the Seminole County Parent-Teacher Association April 22 on the subject of the Cub Scout organization.

Dr. Jack H. Levy, Augusta radiologist, spoke before the Sylvania Rotary Club on May 8 on the subject of x-ray work.

Dr. Merrill Lineback announces the opening of his offices for the practice of otolaryngology at 113 Fourteenth Street, N. E., Atlanta.

Dr. L. F. Lovett, who has been practicing in Metter for the past year, was called to active duty with the Navy on May 1.

Dr. Jesse M. McElveen, of Brooklet, was honor guest at a reception held on May 11 at the Community House there under the sponsorship of the Brooklet Kiwanis Club. On this occasion he was praised for his 50 years of practice in Bulloch County.

Dr. Gibson M. Pattillo, Jr., formerly of Rossville, moved in May to Alma, where he opened a general practice in offices recently completed by Johnson's Pharmacy.

Dr. A. W. Rehberg, of Cairo, in April addressed the Kiwanis Club of his city on the subject of socialized medicine, which he strongly denounced.

Dr. Arthur G. Singer, of Toccoa, has been appointed medical director for civil defense for Stephens County.

Dr. V. P. Sydenstricker, of Augusta, has been elected an honorary member of the Horse Shoe Club of London, whose objectives are to foster friendship between Americans and Englishmen interested in the cure and prevention of disease, to encourage exchange and clinical appointments between the two countries, and to provide hospitality for overseas visitors.

Dr. John K. Train, of Savannah, has been elected senior warden of St. John's Episcopal Church.

Dr. Exum B. Walker, of Atlanta, was married in Atlanta on May 18 to Miss Frances Richardson, of Montezuma.

Dr. J. W. Williams, Jr., of Lavonia, discussed health matters in a speech on May 6 before the Parent-Teacher Association of that city.

DEATHS

BREWER: *Dr. Asbury M. Brewer,* 79, of Tunnel Hill, died April 24. A native of Murray County, he was graduated from the Chattanooga (Tenn.) Medical College in 1901 and practiced in North Georgia for the remainder of his life.

COLSON: *Dr. Dell Cassidy Colson,* 70, of Glenwood, died May 16 after a illness of several weeks. Born in Screven County, he was a 1914 graduate of the Medical College of Georgia and had practiced in Glenwood since that time.

FLOURNOY: *Dr. Harrison Clinton Flournoy,* 65, of Warwick, died on May 4. A native of Clayton, Ala., he was graduated from the Vanderbilt Univer-

sity School of Medicine in 1911 and had practiced since that time in Warwick and Worth County.

HARRELL: *Dr. David Braxton Harrell,* 77, of Tifton, died on April 28 at Lafayette, La., where he and Mrs. Harrell were visiting their son, Dr. E. M. Harrell. Born near Richland, he served in the Spanish-American War, was graduated from Emory University School of Medicine in 1900, and had practiced for 34 years in Tifton, where he was city physician.

ISBELL: *Dr. Jesse E. D. Isbell,* 75, of Toccoa, died on April 30 after an extended illness. Born in Franklin County, he was graduated by the Emory University School of Medicine in 1901, went to Toccoa to practice in 1903, and served in the Army Medical Corps in World War I.

JONES: *Dr. Henry Jones,* 82, retired Coolidge physician, died April 30 in a Moultrie hospital. He had been in poor health for three years, critically ill for a week. A native of Emanuel County, he was graduated from the Emory University School of Medicine in 1895. Shortly thereafter he helped lay out the town of Coolidge and built the first store there. He practiced in the Coolidge area 55 years.

McKEY: *Dr. Earle S. McKey,* 43, Valdosta eye, ear, nose and throat specialist, died April 28 after an illness of several weeks. Born and reared in Valdosta, he attended Duke University, was graduated from the Emory University School of Medicine. Served nearly five years in the Army in World War II, being discharged with the rank of major. Was diplomate of American Board of Ophthalmology, member of American Academy of Ophthalmology and Otolaryngology, member of Caduceus, Phi Chi and Sigma Alpha Epsilon.

MASSOUD: *Dr. Mittry A. Massoud,* 76, of Pineora, died April 30. A 1904 graduate of the Maryland Medical College, Baltimore, he had practiced medicine in Effingham County for 35 years.

PEACOCK: *Dr. John Domingos Peacock,* 68, of Wadley, died April 18 in Jacksonville, Fla., where he and Mrs. Peacock had gone to visit relatives. A native of Brooks County, he attended Emory College, was graduated from the Medical College of Georgia in 1906, and the following year entered practice in Wadley. Was president of the Bank of Wadley, former mayor and former chairman of the Board of Stewards of the Methodist Church.

SCHANZE: *Dr. Raymond Andrew Schanze,* 42, of Homerville, died in an Augusta hospital May 1 after a serious illness of two days. A native of Louisville, Ky., he was graduated from the University of Louisville School of Medicine in 1933 and after several years of internship and postgraduate work came to Homerville in 1939. For a time he was associated with the late Dr. H. G. Huey; then he went into practice for himself.

SMITH: *Dr. Racy Hawkins Smith,* of Lincolnton, died May 4 of injuries received a few minutes before in an automobile collision near his city. Born in Washington County, he was graduated from the Medical College of Georgia in 1925, and opened his practice in Lincolnton in 1932.

VOGT: *Dr. Elkin Vogt,* 49, of Lithonia, died May 5 of a heart attack. Reared in Atlanta, he was graduated from the University of Georgia and the Medical College of Georgia. Before establishing a practice in Lithonia in 1946 he was associated with Drs. Hal and T. C. Davison in Atlanta. Member of Phi Beta Kappa and American Academy of General Practice.

WILKINSON: *Dr. William Lee Wilkinson,* of Bainbridge, died suddenly on May 24, his 64th birthday anniversary. Born in Quitman, he was graduated in 1914 from the Emory University School of Medicine, served overseas as a medical officer with the Rainbow Division in World War I, and moved to Bainbridge shortly after that war. With Dr. Jeff Chason, Dr. Gordon Chason and Dr. R. F. Wheat he established the Riverside Hospital and later the Riverside Clinic in Bainbridge. Had been mayor of Bainbridge, head of Sewanee Council of Boy Scouts, past vice-commander of American Legion Post No. 62 and senior deacon in the Baptist Church.

LETTERS

Macon, Georgia
May 15, 1952

To the Editor:

The Convention was most successful in every respect, and you are to be congratulated on it. Others may not know, but I am fully aware of the effort on your part which made it possible.

I want to thank you again, and most sincerely, for all you did for the Auxiliary during the year. Your interest and assistance were most valuable.

I also want to thank the Medical Association of Georgia for the many courtesies of the Convention, including my flowers and my banquet ticket.

Since the pressure of my own activities has lessened and I will have more time, if there is any way at all in which I may be of assistance to you in the future, please call on me.

Your letter was read to the General Session of the Auxiliary as a part of my report, and was turned over to Mrs. Fowler.

Thank you again for your part in making this year a most pleasant and progressive one.

Sincerely,
Mrs. J. R. S. Mays
President, 1951-52
Woman's Auxiliary to the
Medical Association of Georgia

Tate, Georgia
May 16, 1952

To the Editor:

The cooperation of your office in assisting us in securing the services of a doctor for our community is greatly appreciated. We have had several interested and have finally found a young man who we think will be ideally suited for the practice here. He is Dr. T. C. Boswell and at present he is finishing his internship at Crawford Long Hospital in Atlanta.

Again, with our sincere thanks for your cooperation, we are, with best wishes

Cordially yours,
J. B. Hill, *President*
Tate Community Association

Brunswick, Georgia
April 16, 1952

To the Editor:

Altogether too long have I neglected to write this letter of sincere thanks for, and appreciation of, the delightfully modernistic, appealingly attractive new format of OUR Journal. I am proud of it, and, I know, that with the new polychromatically illustrated advertisements, and fine legibility of all printed matter, it must strut proudly in the forefront of state medical association publications.

I wish you and your associates to know that my devotion to duty has not waned with the years of untiring effort and service I have always endeavored to give organized medicine in Georgia since my formation of the Glynn County Medical Society when I came to Brunswick; and assisting in organizing the old 11th District Medical Society, which was not then a legal component of the state association constitutionally. I also was honored once as District Councilor, before Dr. Arthur Fort appointed me as protem Parliamentarian after the death of Dr. M. A. Clark, of Macon.

It may be possible, Deo volente, that I might attend the coming annual session in Atlanta, as an humble practitioner with no further feeling of the responsibility that I have in the past experienced. If I should not get there in person, I will be there in spirit and in my prayers for a most interesting session.

With my kindest regards, and best of wishes, I am

Fraternally yours,
John W. Simmons, M.D.

Portsmouth, Virginia
May 5, 1952

To the Editor:

I am to be separated from the Navy on June 29, 1952, and am seeking a location for general practice. I graduated from the Medical College of Georgia in 1949, and interned at the U. S. Naval Hospital, Portsmouth, Virginia. I served 13 months in the Korean Theater and in October, 1951, was returned to the U. S. Naval Hospital, Portsmouth. Since my return I have served three months on general surgery, three months on orthopedics and will finish on medicine.

I would prefer a location where I can do surgery, O.B. and general medicine. I would also prefer a locality which has a small hospital available. I know I am asking a lot, but I would like to settle somewhere where my family can be happy and not necessarily where I can make the most money.

I would appreciate any help you can give me in securing a suitable location in Georgia.

I wish to thank you for your time and effort.

Sincerely yours,
Donald W. Schmidt, M.D.

BOOKS

A Textbook of Orthopedics, by M. Beckett Howorth, M.D., in association with Fritz J. Cramer, M.D., A. Wilbur Duryee, M.D., Donovan J. McCune, M.D., J. William Littler, M.D., and Walter A. Thompson, M.D.

This book is based on Dr. Howorth's experience of some twenty odd years in the practice and teaching of Orthopedic Surgery and reflects his excellent knowledge of the subject. It also evidences the carefulness and thoroughness of its author.

The chapter on "History of Orthopedics" is concise and interesting. The presentation of "Anatomy and Physiology of the Musculoskeletal System" is unique and given in an easily understandable manner. This chapter alone makes it an excellent textbook. The meticulous "Examination and Diagnosis", if followed will prove invaluable.

The fundamentals of "Treatment" are stressed in an impressive manner. Proper posture is described and the undesirability of obesity is emphasized. Disorders of the spine, congenital as well as acquired, are outlined in detail. In fact, the section on "Regional Orthopedics" is in itself a book which deals with each location separately, even to the properly fitting shoe for the foot.

The section on "Orthopedic Disorders" contains an extraordinary presentation of congenital deformities and contains many interesting illustrations. Conditions resulting from "Orthopedic Infections" are described and this chapter gives a comprehensive dissertation of poliomyelitis, osteomyelitis, tuberculosis of bones and joints and syphilis. Ninety pages are packed with information concerning orthopedic conditions due to trauma and complications resulting from treatment as well as trauma.

The subject of arthritis is well covered and reiterates the fact that there is no panacean remedy and that management of the case is still the rule. The chapter "Vascular Diseases" covers the subject in detail. "Metabolic and Endocrine Diseases" are presented in a very informative manner. The section on "Neurology in Relation to Orthopedic Practice"

contributes greatly to this book and proves conclusively that there must be correlation between the various specialties, especially neurosurgery and orthopedic surgery.

While "A Textbook of Orthopedics" by Dr. M. Beckett Howorth was, maybe, written for medical students, it is an excellent reference book for any doctor and especially the orthopedic surgeon. It should be placed in every medical library.

—Peter B. Wright, M.D.

The Scalp in Health and Diseases, Howard T. Behrman. St. Louis, C. V. Mosby Company, 1952.

There is perhaps no anatomical appendage that is more in the public eye nor one that receives more concern and care than does the human hair. In contrast, most physicians give little thought and interest to the normal scalp and hair and leave its distractive abnormalities to glib salesmanship of the hairdresser and beautician, shrugging off some real and disturbing complaints of their patients as of minor importance beneath his astute dignity.

This book, a well-organized and well-written condensation of the prevailing knowledge and facts about the physiology and diseases of the hair and scalp, gives us this means of information so needed by all physicians. The encyclopedic scope of this text will surprise most laymen and many physicians in that there is so much known about the scalp and the hair that the prevalent idea that diseases of the scalp are of minor importance is at variance with the known facts.

The meticulous and careful description in the opening chapter—the embryology anatomy and physiology of hair growth—is a generous study of function and structure that no student should fail to digest. The chapters on alopecia and baldness alone are worth the value of the whole book.

The bibliography is extensive, well-documented and correlated, and is happily placed at the chapters' ends.

I know of no other single volume where one can find such a wealth of up-to-date information on a subject so much in the public eye as the human hair.

As such this book should prove an invaluable source of information and can be recommended to the student, the physician, the dermatologist, as well as the barber, beautician and the whole cosmetics industry. I hope it will find its rightful place on the desks and in the minds of all dermatologists and many internists, psychiatrists and general practitioners.

—Herbert S. Alden, M.D.

Office Endocrinology, Robert B. Greenblatt, M.D. Springfield, Ill., Charles C Thomas, Publisher, 1952.

This is the fourth edition of Dr. Greenblatt's well-known book. It has been five years since the previous edition was published and the present volume brings the clinical applications of endocrinology up to date.

Office Endocrinology is written primarily for the general practitioner. It does not include discussions of theory or of the research phases of endocrinology. One of the most valuable features of the book is that it is based upon the author's own clinical experience with the subjects he discusses. The text is well-organized and covers most of the problems in endocrinology which might be encountered in general practice. The major exception to this is diabetes mellitus. This disease and its related endocrine disturbances are not discussed. The greatest emphasis of the book is on female endocrinology. The primary disorders of menstruation, and their treatment, are described. In addition, the use of endocrine therapy is discussed for related problems, such as endometriosis, sterility, abortion and pruritus vulvae. The hormones of the endocrine glands are reviewed concerning their chemistry, physiological action and the available commercial preparations. A description is given of diagnostic procedures and laboratory tests which can be of value in recognizing and treating abnormal endocrine conditions.

Although the text is written primarily for use by the general practitioner, some of the diagnostic procedures given and some of the treatments suggested could not be of much value in "office" endocrinology. Illustrations of diagnostic procedures in this category include luminescence of the vulva and the use of vaginal smears to follow the endocrine changes of the menstrual cycle. An illustration of the therapeutic measures which could not be employed safely in "office" endocrinology is the irradiation of the anterior pituitary gland. Therapy of this type should not be undertaken until extensive studies have been made by expert endocrinologists. In spite of Dr. Greenblatt's enthusiasm for pellet implantation of endocrine preparations, this method of therapy has generally lost favor with endocrinologists in recent years.

The usefulness of the book for the general practitioner, however, is indicated by the fact that this is the fourth edition of this text. The brevity of the discussions as well as the illustrations, tables and charts continue as valuable aids to the clinician. The completeness of the clinical problems covered in this new edition will make it a welcomed book for the general practitioner.

—John R. McCain, M.D.

HOSPITALS

The staff of Middle Georgia Hospital, Macon, at its monthly meeting on April 9 elected Dr. Thomas Harrold chief of the surgical service and Dr. Harold C. Atkinson chief of the medical service. There was no formal program for the meeting, but the case histories of patients who had died during the month were presented and discussed. The most interesting case was that of a one-year-old patient who died of

heart failure; the clinical diagnosis of congenital heart disease, with complete transposition of the great vessels, was confirmed at autopsy.

All Georgia physicians and hospital personnel were invited by Frank Wilson, secretary-treasurer of the Fulton-DeKalb Hospital Authority, to attend open house at the Hughes Spalding Pavilion of Grady Memorial Hospital, Atlanta, on Sunday, June 22, from noon to 3 p. m. Those who attended were given a preview of the pavilion and its facilities at a time when only medical and hospital personnel were present.

St. Joseph's Hospital, Savannah, initiated in May an obstetrical clinic to care for those patients who are unable to afford the services of a private physician but who at the same time are not eligible for a city permit which would guarantee them medical care. The new service, first of its kind in Savannah, covers all phases of maternity care, including delivery and prenatal and postnatal checkups.

The medical staff of the Forest Hills Division of the Veterans Administration Hospital, Augusta, on May 14 heard a lecture by Dr. Bernard P. Wolff, of Atlanta, on "Hyperventilation Syndrome."

The Sisters of Mercy of St. Joseph's Hospital, Atlanta, and the medical staff of the hospital on May 27 honored Drs. W. L. Champion and G. Pope Huguley for having been active members of the hospital staff for 50 years or more.

Representing the staff, Dr. Major F. Fowler presented the doctors a gold plaque with an inscription expressing gratitude for their example and their leadership. On behalf of the Sisters, Sister Mary Cornile presented them with certificates and lapel insignia in recognition of Faithful service and loyalty.

The staff of the Veterans Administration Hospital, Dublin, in May heard addresses by two members of the faculty of the Medical College of Georgia. On May 22, Dr. Peter B. Wright, professor of orthopedic surgery, spoke on "Myositis Ossificans," and on May 29 Dr. Perry P. Volpitto, professor of anesthesiology, lectured on "Acute Cardiac Arrest: Its Etiology, Prevention and Treatment."

Affiliation of the Macon Hospital School of Nursing with Wesleyan College has been announced by Dr. C. L. Ridley, medical director of the hospital. First-year students of the nursing school will devote the entire year to take classes at Wesleyan.

Mrs. Evelyn Richards, who formerly was with the Fulton County Health Department, has accepted the position of director of nurses at Macon Hospital.

The appointment of Dr. Rudolph Jones as chairman of the intern committee of Macon Hospital and the addition of Dr. Edmund Brannen as a member of this committee were announced by Dr. T. L. Ross, Jr., chief of the medical staff, at its May meeting. Dr. Ross also announced that during the preceding month there were 184 births and 52 deaths in the hospital.

SCHOOLS

A revised edition of *Office Endocrinology,* a medical textbook written by Dr. Robert B. Greenblatt, head of the department of endocrinology at the Medical College of Georgia, was recently published by Charles C Thomas, of Springfield, Ill. Double the size of Dr. Greenblatt's original text, the volume is proving a "best seller" in the field of medical literature.

MISCELLANY

The following resolutions regarding the late Dr. Steve P. Kenyon were approved by the Better Health Conference in Waycross on March 18:

"Whereas, it was through the inspiration and vision of Doctor Steve P. Kenyon, of Dawson, Georgia, that the Better Health Council of Georgia had its inception and came into being, and

"Whereas, Doctor Steve, as he was affectionately known, gave unstintingly and unselfishly of time from his busy practice to the improvement and betterment of health and welfare in his community in the State, and

"Whereas, Doctor Steve was so highly esteemed by his fellow physicians that they conferred upon him the high honor of the presidency of The Medical Association of Georgia, and

"Whereas, in spite of progressively failing health of long standing, Doctor Steve continued his vigorous attack on disease and welfare problems, and

"Whereas, the Greatest of All Physicians has at last called his servant, Doctor Steve, to his everlasting reward,

"Therefore, be it resolved that the Better Health Council of Georgia, at this its Southeast Regional Health Conference, express its gratitude to the Great Physician for the many services of Doctor Steve to his fellowman.

"Be it further resolved that this resolution be spread on the minutes of the Better Health Council of Georgia and that a copy be presented to Mrs. Kenyon, and to The Medical Association of Georgia.

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI JULY, 1952 NUMBER 7

Editorials

Could It Have HAPPENED *Here?*

Bold front page headlines in the New York *World-Telegram and Sun* recently cited an undisclosed number of doctors and druggists operating an unethical prescription dodge.

The doctors and druggists, having bought ownership shares in a "dummy" pharmaceutical corporatiion, were committted to writing and handling prescriptions for their firm exclusively. At the end of each year the doctors and druggists split the dividends according to the amount of business done. This system had been operating in sections of Brooklyn.

While "exposes" of this type are rare, it is the occasional breach of medical ethics that undermines the reputable standards of the profession. And when a story of this type breaks, it always poses the question of mending your own fences.

To our knowledge there is only one pharmaceutical firm in Georgia that might be suspected of unethical "knickback" practices. Yet even one such firm is one too many!

There is no borderline fringe for such dealings in medicine. The Georgia doctor must bend his efforts to make sure "it can't happen here."

MONEY

In our society of free and competitive enterprise the individual is entitled to a reasonable compensation for his services. As a member of this free society, the physician too justly deserves the "fruits of his labor" but so does the butcher, baker and the candlestick maker. Only by virtue of the traditions of the healing art and the wisdom of its members has the physician commanded the respect of his fellow citizens. But under circumstances other than those enjoyed in peace and freedom, the doctor loses this traditional respect. Witness the physician of the Third Reich, the Soviet or present-day England; and the physician stripped of his mantel in war and one recognizes at once the necessity for preserving our system of free enterprise especially relative to medical practice.

But all our energies will be for naught, will gain us not one wit if the impression which is in the minds and hearts of a few and gaining momentum under the stimulus of certain Washington advocates infest the many that we physicians are as one Washington wag put it—money-mad.

The evidence is to the contrary; that we physicians know. Our colleagues, if any, who are guilty of the charge, do our noble profession an injustice. That the situation does exist however is evidenced by the necessity of formation of such groups within our organization as grievance committees and the like. Each must play his part in weeding out, discouraging and if necessary bring to task the phsyician who places the "things that are Caesars" above the Hippocratic Creed.

—Peter L. Scardino, M.D.

THE INTERPROFESSIONAL COUNCIL: *A Benefit to the Public*

Rancorous stepping-on-toes among allied professional health groups, which forever plagues the harmonious existence of state medical societies and deters the attainment of objectives felt necessary by doctors, may well be on the way out in Georgia.

The Council of the Medical Association of Georgia, meeting in June, unanimously endorsed the ultimate formation of an Interprofessional Council, the purpose of which will be to eliminate deep-seated enmities and to encourage increased cooperation among such professional groups as physicians, pharmacists, optometrists and dentists.

Tentatively, the Interprofessional Council will be composed of key representatives from this Association, the Georgia Pharmaceutical Association, the Georgia Dental Association and the Georgia Optometric Association. The State Nurses Association is also expected to participate.

The Council's endorsement of the formation of such an organization of cooperating professional groups is truly commendatory. Nor does its action denote "starry-eyed" thinking on the part of our Councilors.

That such a representative body can meet on common ground and accomplish much good has been proven in the state of Illinois, where a similar interprofessional council was formed last year (mainly through efforts of the Illinois State Medical Society). With an avowed purpose of guarding the health and welfare of the people of that state, the Illinois Council has already come up with solutions to countless problems involving poor interprofessional relationships among the participating professional associations. Furthermore, the Council's success on the state level has led to formation of similar organizations on a community level.

So can it be in Georgia. And our physician-members may feel proud in realizing that this Association has taken the lead in promoting the formation of an Interprofessional Council at the earliest possible date.

MATERIA MEDICA

O you dimidiate doctor, you half-faced feeler,
You needle nun! in my outrance
What fool engaged your outrecuidance?
What outriding idiot conveyed your hack
Here to plant a bodkin in my back?
And poultice my mind with a joke
Miscarried and miscellaneous like everything else in your poke?
O ye daughters of Jerusalem Oak,
But I am sick! And this is a healer?

And, cosseting capskull, I am confined
With modern medicine's fair-haired apostle
Who sings penicillin like a drugged throstle!
His hand is under my head tenderly,
But he will not comfort me with flagons of sassafras tea,
Or elderberry wine. Ye walls of shittim wood he needles me
Again! I'm going non compos in my mind!
And this is a healer, O you Lebanon cedar!
You alderliefest alder, this is a medicine man
Who does more than catnip can?
My lights and liver have both gone askew,
And I have a bit of kidney trouble and my blood, forsooth, is blue,
And, mountains of mullein, some colic too
And he won't give me a drink of calamus water

Send him without, ye nookshoitten plain.
I shall arise and take the helm
With a dose of slippery elm.
Heartleaf and foxglove and queen of the meadow
Will accomplish a man in me where there was but a shadow,
And sassafras will change the tune in my bed! O
Ye curative country, I'll be unhandesled again!

—George Scarbrough

Reprint from *The Saturday Review of Literature,* January, 1952.

CHARLES C. LAMB, M.D., and

FRANK F. WOOD, M.D., Albany

Primary CARCINOMA *of the* LIVER

A Review and Case Report in a Colored Juvenile

Primary cancer of the liver is as rare as metastatic cancer is common. Likewise, the diagnosis prior to autopsy is also rare, it having been diagnosed in only six per cent of one series of cases by Spratt.[8]

Rosenblatt and May[18] state that primary carcinoma of the liver, despite its rarity, is the most common cause of hepatic tumor in infancy, while Rosenberg[21] states that in younger persons a mass in the region of the liver should always be regarded as neoplastic until proven otherwise.

The most comprehensive study in juveniles was done by Steiner[22] in 1938 in which he collected seventy-five cases and added two of his own. These cases extended from 1854 to 1937. Twenty-two of these could not be classified as to type, three were bile duct carcinomas and fifty-two were hepatomas. Even in children, 68 per cent of liver carcinomas were in males corresponding to the same preponderance as found in adults by other investigators.[1 5 9 13] The post mortem incidence of carcinoma of the liver varies from a conservative .1 per cent to .66 per cent[1 3 13 17 21] in America but may be as high as seven per cent in Asiatic countries.[17] This compares with an incidence of 7.2 per cent of carcinomas of all types found at the time of autopsy.

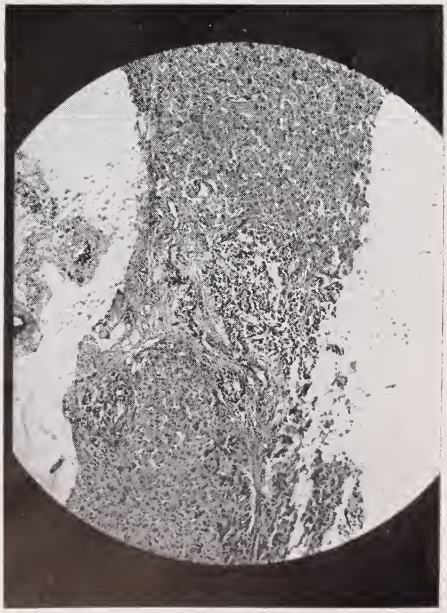


Fig. 1. Aspiration biopsy showing area of malignancy in center.

There are no conclusive figures as to the incidence in the Negro since many have reported cases in the literature but have failed to state the race. However, Webb feels that the incidence in Negroes is higher than their proportion to the population and this opinion is also held by Rosenberg and Oschner[21] who feel that they may carry their predisposition for the disease from the normal African habitat where it is well known that the occurrence of liver carcinoma is much higher, especially among the Bantu Negroes.[20]

The diagnosis of any disease rests upon classical or pathognomic signs and symptoms. Therein lies the difficulty in making an anti-mortem diagnosis of primary carcinoma of the liver unless needle biopsy[4] or exploratory laparotomy is done.[21] In carcinoma of the liver a reasonable suspicion in the presence of a mass in the region of the liver, especially in an adult who has known cirrhosis,[1 2 8 9 11 13 14] is about the only criteria available. Chart 1 shows the occurrence of symptoms as noted by Spratt and Grayzel[8] which do not materially differ from the statistics by Rosenberg and Oschner.[21]

Signs	*Per Cent of Patients*
Rapidly enlarging abdominal mass	88%
Abdominal pain	82%
Sustained temperature over 100 F.	64%
Marked weight loss	53%
Severe anorexia	47%
Nausea and vomiting	47%
Constipation	47%
Icterus	47%
Ascites	35%*

*50 per cent of these bloody.

According to the same authors (Spratt, and Grayzel[8]), the icterus index, alkaline phosphatase, and B.S.P. tests are of laboratory value. The blood sugar, serum protein, cholesterol and cephaline flocculation tests are not significant.

In the differential diagnosis cholelithiasis, carcinoma of the gallbladder, bile ducts, and ampulla of Vater, pancreatic tumors, cardiac failure, hepatic abscess, syphilis and gumma, hepatic cirrhosis, Banti's disease, metastatic carcinoma, Hodgkin's disease, leukemia and retroperitoneal tumors[1 17 38 39] must be taken into consideration. The use of thorotrast has been suggested by one[12] but others feel it may initiate malignant change. Esophageal varices are almost never present in metastatic carcinoma[15] though, of course, may be present in primary carcinoma due to the predominence of cirrhosis and other hepatic diseases as predisposing factors.

The treatment of primary carcinoma must be of a radical nature to be of any avail, and therefore must rest upon early diagnosis since the untreated course is about four to five months.[3] Radical hepatectomy has been used with varying success[3 6 21]

REPORT OF CASE

A 15-year-old colored male admitted to hospital Sept. 23, 1951 with chief complaint of epigastric pains. Upper abdominal pains had been present for seven weeks previously. There was no history of nausea or vomiting or diarrhea and the appetite had been good. There had been a weight loss of approximately 30 lbs. during the present illness. Food intake apparently had no relation to the pain.

Physical examination revealed a young colored male, well developed but poorly nourished. The skin was dry and showed evidence of weight loss. The sclerae had an icteric tinge. The lungs were essentially negative, breath sounds being normal, and respiratory rate considered normal. The heart was not enlarged, nor were murmurs present. The rate was 110 per minute. B.P. 120/70. The abdomen was distended in the upper half and was symmetrical to inspection. On palpation a hard mass was found in the right upper quadrant and extending into the left upper quadrant. This mass was not acutely tender. At the time of examination it was presumed to be liver. The mass moved with respiration.

A G. I. series showed the stomach was elongated and pushed downwards. Fluroscopic examination showed generalized abdominal haziness in the upper two thirds.

Routine chest x-ray showed elevation of both diaphragms. Icterus index of 20.3. Thymol turbidity was 5 units. Prothrombin time, blood and urine essentially negative except for an anemia. Hg. 68 per cent.

Admission impression was an aleukemic leukemia. Sternal marrow showed normal maturition of leukocytes. Liver biopsy was done and showed malignancy, probably of metastatic origin.

Three weeks later the patient began having edema of the abdominal wall. The appetite continued good. The icterus was not perceptually increased. One week later edema of lower extremities was more marked. The upper portion of the body, face and limbs were markedly wasted. At this time he was complaining of much abdominal pain. He died four days later.

AUTOPSY: The autopsy disclosed approximately one liter of bloody fluid in the peritoneal cavity. The liver almost filled the entire peritoneal cavity and had a diffusely nodular appearance. Weight of the liver was 5,100 gms.

Sections from the liver showed a very active and destructive tumor growth composed of cells that varied greatly in size and shape. Numerous mitotic figures were seen and the tumor cells invaded the liver parenchyma.

Reviewing the body as a whole there was no evidence of

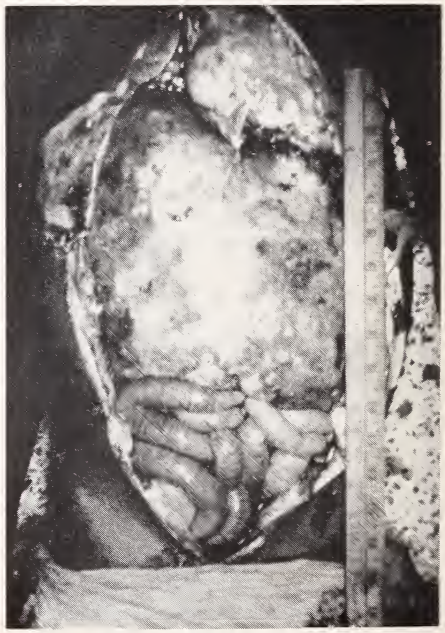


Fig. 2. Autopsy, liver filling most of abdominal cavity.

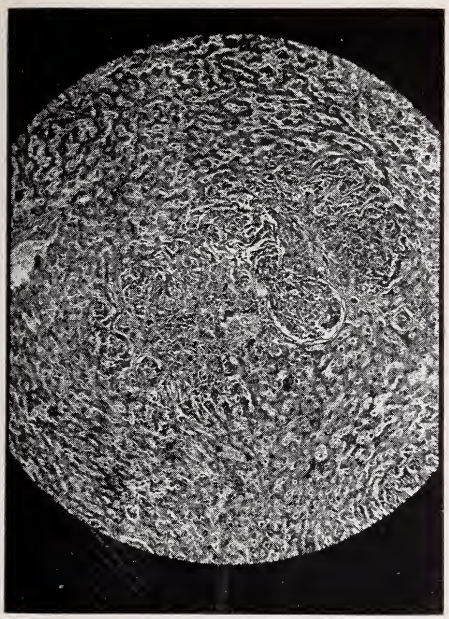


Fig. 3. Section of liver—Tumor invading between liver cords and into vein.

any metastatic growth nor any lesion that could be considered primary outside of the liver. Gross and microscopic evidence indicated that this was a primary liver cell tumor.

Summary and Conclusion

A review of the literature reveals primary carcinoma of the liver to be relatively rare in all ages and is even less common between infancy and sixteen years of age. Hepatoma should always be considered in the differential diagnosis of a mass in the upper abdomen. Needle biopsy of the liver is the best diagnostic aid.

A case of a hepatoma in a juvenile is reported.

References

1. Brick, I. B.: Primary Malignancy of the Liver, Am. Pract. & Digest. No. Treat. 1:475-479 (May) 1950.
2. Allen, R. A., and Lisa, J. R.: Combined Liver Cell and Bile Duct Carcinoma, Am. J. Path. 25:647-655 (July) 1949.
3. Woods, C. C., and McClure, J. N.: Primary Carcinoma of Liver, South. Surgeon 15:538-540 (July) 1949.
4. Schiff, Leon, et al.: Experiences With Needle Biopsy of the Liver in Patients with Malignant Hepatic Neoplasm, J. Lab. & Clin. Med. 32:1524 (Dec.) 1947.
5. Hunt, H. F., and Nerkheiser, S. W.: Primary Carcinoma of the Liver, Pennsylvania M. J. 51:755-758 (April) 1948.
6. Colcock, B. P.: Carcinoma of the Liver; Primary and Secondary, S. Clin. North America, 28:673-678 (June) 1948.
7. Case Records of Mass. General Hospital (Case 34351), New England J. Med. 239:339-341 (Aug. 26) 1948.
8. Spratt, S. D., and Grayzel, D. M.: Primary Carcinoma of the Liver, Am. J. Med. 5:570-573 (Oct.) 1948.
9. Holley, H. L., and Pierson, G.: Primary Carcinoma of the Liver, Am. J. Med. 5:561-569 (Oct.) 1948.
10. Beynon, A. E.: Primary Carcinoma of the Liver in a Boy, Age 15 years, Lancet 2:528-530 (Oct. 2) 1948.
11. Clinical Path. Conf. Nichols VA Hospital, Manifestations of Liver Disease, Postgrad. Med. 2:203-206 (Sept.) 1947.
12. Layne, J. A., and Hildebrand, E.: Primary Carcinoma of the Liver Arising in the Left Lobe and Simulation of Spleenomegalia, Gastroenterology 9:604-607 (Nov.) 1947.
13. Hoyne, R. M., and Kernohan, J. W.: Primary Carcinoma of the Liver: A Study of 31 Cases, Arch. Int. Med. 79:532-534 (May) 1947.
14. Case Records (Case 32412) of the Mass. Gen. Hospital, New England J. Med. 235:557-560.
15. Primary Carcinoma of the Liver (Case 32201) New England Med. 234:673-675 (May 16) 1948.
16. Armanino: Idiopathic Dilation of Common Bile Duct with Coexistant Hepatic Carcinoma: Report of a Case, Ann. Int. Med. 24:714-726 (April) 1946.
17. Webb, A. C.: Primary Carcinoma of the Liver, Arch. Path. 40:382-386 (Nov.-Dec.) 1945.
18. Rosenblatt, M. S., and May, J. A.: Primary Carcinoma of the Liver in Infants and Children, Northwest Med. 45: 96-97 (Feb.) 1946.
19. Lungs, Adrenal Glands and Vertebras, Case records of Mass. Gen. Hospital (Case 31232), New England J. Med. 232:682-684 (June 7) 1945.
20. Kennaway, E. L.: Cancer in Negro in Africa and America, Cancer Res. 4:571-577 (Sept.) 1944.
21. Rosenberg, M. L., and Oschner, A.: Primary Carcinoma of Liver, Surgery 24:030-1065, 1948.
22. Steiner, M. M.: Primary Carcinoma of Liver in Childhood, Am. J. Dis. Child., 55: 807-824 1938.

HEMATURIA

RUDOLPH BELL, M.D., and *ROY F. STINSON, M.D.*, Thomasville

Hematuria as a symptom of a disease is of such grave significance that it demands an immediate and complete urological investigation to determine its origin. The presence of blood in the urine usually denotes a serious disease of the kidney, ureter, bladder, prostate gland or urethra. It is by early recognition of a dreaded disease that a complete cure may be expected from adequate treatment. To procrastinate in making the necessary examination, which has been described by one of us,[1] is likely to give the disease sufficient time to become so far advanced that even if the unfortunate victim is subjected to a most radical surgical procedure, a cure cannot be expected.

That the public needs to be better informed of the

Read before the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 12, 1952.

significance of hematuria is borne out in Cahill's[2] investigative work in 1942. An endeavor was made to determine whether or not the average duration of hematuria before operation was shortened in malignant diseases of the kidney during a ten-year period in which there had been an educational program to the public and profession as to the early diagnosis of cancer. The results showed that the average duration of hematuria was practically the same at the beginning of the ten-year period as it was at the end.

It is not uncommon to have an individual report for treatment because of blood in the urine intermittently over a period of months. He states that he took some medicine which would cure him at first but lately it does no good. On examining this individual one finds an incurable cancer of the bladder, or a kidney completely destroyed by the constant irritation of a long standing calculus. It is characteristic of hematuria to be intermittent. The bleeding will stop for a time whether the individual takes treatment or not. Medicine only gives him a false sense of security, and no drug will cure any one of the three major causes of hematuria.

Hematuria is present at some time in more than 50 per cent of the cases of cancer of the urinary tract. If accompanied by pain the hematuria is likely to receive more consideration than does painless hematuria, whereas the latter may be the more serious. A small amount of blood, even microscopic blood, in the urine should receive as much consideration as does a massive hemorrhage.

There are various causes of hematuria, but the three conditions which are to be considered first and in order of sequence are: (1) cancer, (2) tuberculosis, or (3) stones in the urinary tract. If after a complete urological investigation the above three conditions are ruled out, then one may feel more at ease in electing the type of treatment to be instituted.

Some of the lesser important causes of hematuria are systemic diseases such as nephritis, blood dyscrasias, renal infarction in endocarditis, scurvy, hemophilia, acute fever, syphilis and allergy. Localized infection of, and also adjacent to, a portion of the urinary tract, as in appendicitis and pelvic abscesses, must be considered as a possible cause. Congenital anomalies, polycystic kidney disease, injuries, bilharziasis, and various drugs are also to be considered. Some of the drugs that may cause blood in the urine are turpentine, carbolic acid, cantharides, urotropin, salicylates, barbiturates and the sulfonamide derivatives. In recent years renal varix and varicosities have been described as a cause of hematuria.

Congenital deformities of the urinary tract cannot be discounted as a cause of hematuria as approximately 20 per cent of urological patients present some developmental error of the urogenital system which was responsible for their admission to the hospital. Patients with acute nephritis, of course, should be treated as a medical problem and should not be subjected to instrumentation. In the subacute state, if one is undecided as to underlying pathology, it is safe to do a complete urological investigation.

At times after a most painstaking urological examination the cause of the hematuria cannot be determined. The condition is then referred to as "essential" of "idiopathic" hematuria which diagnosis, according to Ewing, can be translated to mean "I do not know." If the cause of hematuria cannot be determined after a most complete urological study, the examination should be repeated in three months. By all means, rule out cancer, tuberculosis and stone.

When a cause for hematuria is discovered in the course of an examination it is not good practice to accept the one finding as the sole cause of the bleeding. There may be a disease of a more serious nature accompanying the first finding. This is well demonstrated in cases 1 and 2. The first patient had polycythemia which could account for the hematuria. A complete urological investigation revealed cancer of the kidney. The second patient was thought to have a stone in the ureter, whereas, a complete investigation revealed cancer of the kidney. In both patients cancer would not have been discovered if the investigation had been stopped after finding one cause sufficient to cause the bleeding.

REPORT OF CASES

Case 1.—D. D. a 47-year-old colored male, was admitted to Archbold Hospital, Nov. 10, 1947, because of pain in the right kidney region, and hematuria. The red cell count was 8,200,000 and the hemoglobin was 110 per cent. Cystoscopy revealed blood coming from the right kidney. A bilateral retrograde pyeloureterogram revealed the left renal pelvis and calyces to be within normal limits. A large filling defect was noted in the pelvis and calyces of the right kidney. Blood clots in the kidney pelvis, as a result of the polycythemia, was considered. The pyelogram was repeated several times with the same findings. On Dec. 1, 1947, a very large right kidney and tumor were removed. Deep x-ray therapy was instituted. Microscopic examination revealed papillary carcinoma of the right kidney. The patient lived for two years after operation and died of a tumor mass in the right side.

Case 2.—C. D. T., a 42-year-old white male, was admitted to the hospital Jan. 10, 1944, because of hematuria and right renal colic. Because a scout x-ray revealed a shadow in the region of the right ureter, an attempt was made to extract a ureteral stone. Retrograde pyeloureterograms revealed a very large kidney tumor. The calcification shadow was 2 cm. from the ureter and was a phlebolith.

Case 3.—J. W. W., a two-year-old white male, was admitted the hospital Aug. 8, 1950, because of nausea, vomiting, and a mass in the right side of the abdomen. The child had passed blood in the urine three months previous. Excretory urogram, cystoscopy and retrograde pyeloureterogram revealed a normal left kidney, but a very large tumor mass of the right kidney. On Aug. 16, 1950, the right kidney was removed. It was necessary to resect the tenth, eleventh and twelfth ribs to deliver the kidney so the pedicle could be ligated before manipulating the kidney. Microscopic examination revealed embryoma, Wilm's tumor type, of the right kidney. Deep x-ray therapy was instituted. Patient made an uneventful recovery and was dismissed from hospital Sept. 9, 1950. Follow-up on this child reveals a healthy youngster with no evidence of return of the old condition.

Case 4.—B. F. Mc., a nine-month-old white girl, admitted to Archbold Hospital Sept. 2, 1947, because of hematuria, and a mass in the right side of the abdomen . Urological investigation revealed a large tumor of the left kidney. A nephrectomy was done. Microscopic examination revealed Wilm's embryonal tumor of the left kidney. A report on this child one year ago stated that she was in good health.

Case 5.—Mrs. S., a 35-year-old white female, was admitted to the hospital in 1943 because of hematuria, and a right

renal colic. A stone approximately 1½ cm. in diameter was noted in the lower major calyx. The patient did not elect to have the stone removed as advised. In 1947, four years later, this patient returned to the hospital with the kidney filled with pus and stones and completely destroyed. It was necessary to remove the kidney and its contents.

Case 6.—W. A. G., a 46-year-old white male who had had intermittent hematuria four years. Urological investigation revealed a massive growth in the bladder extending over the trigone and prostate. Biopsy revealed papillary transitional cell carcinoma of the urinary bladder. On Oct. 20, 1950, a bilateral uretero-intestinal anastomosis was done. On Nov. 10, 1950, the bladder was removed. A course of deep x-ray therapy was administered. The patient made an uneventful recovery and was dismissed from the hospital Dec. 19, 1950.

Comment

No age group is exempt from hematuria as is noted in cases 3 and 4. Case 3 is a two-year-old boy. Case 4 is a nine-month-old girl, both of whom had cancer (Wilm's tumor) of the kidney. They are living and, apparently, well two and five years postoperatively.

Hematuria caused by the so-called silent stone cannot be ignored as is noted in case 5. Operation for removal of the stone was advised. Postponement of the operation necessitated removal of the kidney four years later.

Case 6 took drugs for intermittent hematuria over a period of four years. The cancer of the bladder was so far advanced that it was necessary to do a uretero-intestinal anastomosis and removal of the bladder before offering this patient any degree of comfort.

Conclusion

Once hematuria is noted, by all means determine its cause. It may be a symptom of a serious condition. If the condition is detected in its early stages, it can be cured.

Quite often there are other causes of hematuria than the one most obvious. There is no drug that will cure hematuria. Hematuria is a symptom and not a disease.

REFERENCES

1. Bell, Rudolph: J. M. A. Georgia 31:58-60 (Feb.) 1942.
2. Cahill, G. F.: J. Urol. 47-244-234, (March) 1942.

DISCUSSION

DR. MONTAGUE L. BOYD (Atlanta, Ga.): Sooner or later almost every urologist writes one or more papers on hematuria. While it is rare that any article now written on the subject reports anything which is astonishingly new to urologists, these papers are necessary because they help us to keep in mind the importance of always urging that a more or less complete urological examination be done in cases of hematuria, especially of the painless variety. And the publication of papers on the subject serves to warn the general medical men of the danger of neglecting to search for the cause of the bleeding.

It should never be forgotten that any physician, who neglects to advise his patient that an investigation must be made to discover the cause of the bleeding, assumes the responsibility for whatever trouble the patient may experience later. And it is his duty to warn the patient in such fashion that there can be no misunderstanding about what is being said. If the patient then chooses not to follow the advice, it is he upon whom the responsibility falls.

In our anxiety to impress upon the medical profession the importance of thoroughly investigating these conditions, I am afraid that we urologists are perhaps inclined to overemphasize the dangers of all hematurias. Unfortunately, as the authors point out, nearly all the hematurias are transient so that the patient and many physicians are apt to assume that they are of no serious importance or that they have been cured by some medication. The uninformed are apt, therefore, to think the urologist has exaggerated the possible seriousness of hematuria. Therefore, in any article on hematuria it is, it seems to me, desirable to point out the difference between painless hematuria and that accompanied by pain or discomfort. Also, that by far the greatest number of cases of hematuria which are seen in women are the result of cystitis, and that hematuria is seen in benign prostatic hyperplasia far oftener than we see it in carcinoma of the prostate.

On the other hand, painful hematuria may well have a serious origin—it may be the result of obstruction produced by carcinoma of the urinary tract, or of carcinoma associated with urinary tract infection.

The fact remains, as Drs. Bell and Stinson point out, and can stand being repeatedly emphasized, that the origin of the hematuria should be discovered in every instance if the attending physician is to fulfill his obligation to his patient. Age, sex, symptoms or not, existing infection, or financial condition offer no excuse for not advising such a complete investigation as may be necessary to discover the cause of the blood in the urine.

The causes of hematuria are so many that some of us may never encounter some of them. I have recently had two very interesting cases of hematuria with causes new to me—one of bleeding severe enough to cause clots, produced by prostatic stones and prostatitis and, the other, hematuria with a congenital deformity of the lowest minor calyx, such as is seen with new growth of the kidney. After an extensive study including an aortogram, a nephrotomy was done and no evidence of growth could be found.

The Care of the FEMALE *in the* CLIMACTERIC

ROBERT A. ROSS, M.D., Durham, N. C.

The professional and lay press contain many articles on the so-called "critical" time in a woman's life. Most all are helpful but some are confusing. The particular epoch covered in this presentation is the ending of the reproductive life of the female. This is definitely not the end of the sexual

From the Department of Obstetrics and Gynecology, Duke University School of Medicine.

Read at the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 14, 1952.

life, the useful life, the attractive life, or the productive life of the woman. If a proper and complete explanation of these years is given and if the female can be reassured that she is not "through," that she will not go crazy, or not "change" in anyway except, perhaps, for the better, she should and will pass this time in relative tranquillity and soon come into a happy, mature and helpful era. This period is not a disease, unless the business of living and being subjected to the anxieties, tension and exigencies of day to day living is a disease. By adequate conditioning, a show of sympathetic understanding, thorough physical checking, and assurance that definitive measures are at hand there is no reason why this particular epoch should not be broached in fine fashion and actually entered into with pleasure and relief.

Menopause and Climacteric

The term menopause strictly applies only to the cessation of the menstrual periods. The term climacteric, referring to the period of reproductive regression is preferred. Often this epoch is considered as a disease or syndrome. Under any circumstance and in either sex the 5 year period (from 40 to 45 or 45 to 50) is a critical and exacting one. In the married woman either the presence or lack of a family may be equally disturbing. The realization that the last chance of reproducing has passed in the woman who desires a child, or the fear of pregnancy at this late date in a woman who has reared a family, may disturb mental tranquillity. The childless woman who has not made adequate adjustment and the devoted mother who, with uncompensated grief, sees and feels her children breaking home ties make unusual demands on natural reciprocity. The business of educating a family, seeing that it is favorably presented and assuring it some degree of security is most exacting. The husband is a remarkable factor. The successes and failures over a period of years, the multiform problems that he has brought home, and equally important, those that he has not brought home, the precarious endeavor at a time when his mental and physical agility often are incorrectly and prejudicially estimated, in trying for the last deal that will give economic inedependence, all add doubt and worry to a varying and chaotic mind. These and many other reflecting factors make one realize that the climacteric is not a disease unless one considers living and the aging process a disease. It also gives an insight into the probable futility of routine substitutional therapy alone being given in an attempt to push back and withhold the natural gradual sequences associated with the climacteric.

There is a definite functional limit to the ovary. In normal senescence this is probably characterized by increasing refractivity on the part of the ovary to the pituitary gonadotropes causing failure of ovulation and resulting corpus luteum formation which in turn would eliminate progesterone as a modifying influence on the gonadotropic secretion of the pituitary. At the same time the ovary might respond to the follicle stimulating portion of the pituitary, in which event one would expect bleeding from estrogenic endometrium because of alterations in estrogenic levels. As these alterations become less pronounced, bleeding ceases. With the restraining ovarian influence removed, the cyclic function, qualitatively and quantitatively, of the pituitary is lost and the gonadotropic function is maintained at a higher level.

The behavior of the thyroid gland varies. We should expect an increased thyrotropic influence from the less inhibited pituitary. It is noteworthy that symptoms of hyperthyroidism may be often encountered at this time. However, hypothyroidism may be noted, though not so frequently.

Anterior Pituitary

Many functions have been ascribed to the anterior pituitary and many hormones have been thought to come therefrom. The pituitary is relatively a small organ and contains three types of cells. It is situated in the middle of the skull where a slight increase in size or deviation from the normal would readily be interpreted in terms of headache, visual disturbances, x-ray findings, physical alterations, blood hormone changes or other recognizable symptoms. How much simpler the problem would be if it could be shown that the anterior pituitary put out a "universal" hormone which served all the demands of growth, thyrotropic, gonadotropic, lactation and other pituitary functions ascribed and true. There is a distinct probability that investigators have been "chipping off" portions of a hormone and carrying it in the direction of their research and interest. The alterations of the pituitary by other hormones, by depressing its function and by dilution, is more easily understood. It is our belief that histologically the pituitary is fairly constant.

Most of our attention in the past has been directed to the pituitary ovarian relationship. The possible role of the endometrium has been mentioned. It seems orderly and proper that the adrenal must be considered as a more integral part of sex endocrinology. The adrenal steroids have a similar chemical structure to the estrogens and it would seem that they might substitute for the lowered estrogens in an effort to depress and stabilize the relatively uninhibited pituitary in ovarian failure. It also is likely that the medulla of the adrenal also is affected by this stimulation which would result in an increase of epinephrine. This could explain the well known instability of the vasomotor systems in climacteric women, an instability which certainly is the chief indication for organotherapy.

Ovarian Failure

Estrogenic ovarian failure, more severe in degree than that which occurs in many instances of intercurrent amenorrhea during the reproductive period, occurs physiologically during the sexual aging of woman or may be induced by radium or roentgenologic therapy. Complete ovarian deficiency occurs in bilaterally oophorectomized women. In all of these instances, the causes of the failure may be reduced

to a simple common denominator, intrinsic ovarian damage resulting from senility, radium, roentgen ray and surgery. Patients with this type of intrinsic ovarian failure afford an excellent opportunity for the investigation of possible alterations in the androgenic functions of the adrenal secondary to ovarian deficiency or deprivation. If the findings reported upon patients with amenorrhea were interpreted correctly studies of 17-ketosteroids excretion during the climacteric and after artificial menopause should show similar, if not more marked, elevations to those during amenorrhea. This study we have done. Over a period of years sufficient data have been collected to support, in our judgment, the probable explanation of the hormonologic, physical and histologic interplay. There is accumulating evidence that the psychogenic factor should be included.

Ovario-Adrenal Reciprocities

An analysis of these data suggest the theory of ovario-adrenal reciprocities which are influenced chiefly by way of the pituitary. During early life and until adolescence is well advanced the adrenopituitary interchange is dominant in steroid metabolism. When primary or adolescent hypo-ovarianism occurs and is of sufficiently severe grade to result in failure of sexual maturation, this axis retains its dominant position even during adult years. Under these circumstances, the level of adrenal function remains at that characteristic of late preadolescence. Normally, however, with the advent of adolescence and the beginning of full ovarian function, the ovariopituitary interchange is superimposed upon the primordial adrenopituitary one. The result is an harmonious arrangement. The pituitary becomes conditioned to working with both adrenals and ovaries and to being influenced, as regards its functions, by the regulatory effects of the intrinsic steroids of both the ovaries and the adrenals. During the reproductive period the ovary and pituitary come to dominate the endocrine system. When, however, ovarian failure occurs from pathologic or physiologic causes, the pituitary, accustomed to being balanced in function by both the adrenal and ovarian steroids, is released in part from its inhibitions and becomes hyperactive, thus the adrenal cortex is stimulated to secrete greater quantities of steroids. The now dominant adrenopituitary interchange is stronger because of its previous conditioning by the ovary and pituitary. Eventually, however, stabilization occurs from the inhibiting effects of the increased amounts of adrenal steroids upon the function of the pituitary. The result is that during the late stages of sexual aging and during somatic senescence, the adrenopituitary axis becomes stabilized and steroid output reaches normal levels. We should remember that the adrenal is one of the earliest functioning glands and one of the last to cease functioning.

If there is any inherent weakness in the individual it is likely to become manifest at the climacteric and should be anticipated. The only natural and normal course of menstruation at this time of life is cessation. This may be a gradual diminution of the amount at each period or a lengthening of the interval. In any event the trend should be toward stoppage. The basis for this was given in the discussion of hormonolgy. Any departure from this course must be investigated and explained. The occurrence, at this time, of hyperestrogenic endometrial bleeding has been noted and the association of this with corporal carcinoma has been suggested. Currettement of the uterus and careful study are obligatory. Empiric endocrine and x-ray therapy are condemned and the removal of endometrial tissue for biopsy examination by the "punch" method is inadequate. In any event, satisfactory diagnosis must be made for this type of bleeding. A most helpful adjunct is the study of exfoliative cytology in the vagina and cervix. It is now available in most centers. Its use should be obligatory. All suggestive smears must be checked by careful tissue study. In one year 1,089 women in North Carolina died of cancer. Of this number, 324 died of cancer of the uterus. In that year 15,732 women died in the state. This means that one woman out of every fifteen died of cancer and that one out of every 48 died of cancer of the uterus. To state it another way, 196 more women in this state died from cancer of the uterus than from appendicitis. Seventy per cent were diagnosed only on admission to the hospital. This possibility must be investigated and eliminated before the blanket indictment of the "menopause syndrome" is made.

One should remember that the business of living by this time (40 to 50 years of age) is beginning to make inroads and the exigencies of life are apt to become manifest. It is recognized that women under certain circumstances and conditions at this time may become melancholic. A noteworthy instance is the rural woman, whose endocrinology, in all probability, is no different from her urban sister. One should dissociate the recognized and proven symptoms of the climacteric, such as vasomotor disturbances, from the psychic aberrations that are not peculiar to the sex.

Treatment Caution

The psychiatrists have cautioned that estrogenic therapy should not be exhibited unless one is treating definite symptoms such as "hot flushes" though some report specific benefits of the estrogens in involutional melancholia. It is impossible to separate specific suggestive therapy under these circumstances and, as a matter of fact, psychotherapy should be the first agent in treating a psychosis. There is a distinct possibility that organotherapy may be a distinct menace. The result of over zealous, indiscriminate or routine therapy may result in bizarre symptoms and actual harm.

It is most urgent that we make a beginning in our effort to help the inchoate female. We cannot start with the patient's grandmother but we can talk to this mother and hope that anything of value might be passed on to daughter and granddaughter; as a matter of fact we may have the opportunity of seeing the daughter as a primagravida or the granddaughter in adolescence. It is obvious that an unhurried, orderly

and detailed interview with either of these generations will prove a time saving and rewarding experience.

Psychologic Factors

The psychologic factors involved at the climacteric must be evaluated; realizing that mental disorders do not arise from physiologic dysfunction, but do arise from demonstrable psychologic factors. At critical times there may be an inability of the nervous system to adjust to stress and strain. The patient may have difficulty in reconciling herself to "biologic uselessness", which must result in anxiety and false concept.

Actually so-called involutional melacholia is related to the manic depressive psychoses, and these fall into three main categories; emotional disturbances without history of previous episodes; obvious exacerbation of previous neurotic tendencies and definite psychoses in the manic depressive group.

Psychogenic Factors

We know that human beings are bi-sexual. This may startle the adolescent but has deeper repercussion when depersonalization is brought out by masculinity physically evident at the climacteric. The fear of death is similar to "battle" fatigue or world weariness and actually has as its basis and association the fear of the cessation of sexuality and decreased sexual attractiveness. Greater instability causes more severe symptoms which are definitely neurotic, but which have been present for years prior to this epoch. If nervousness and instability were due only to ovarian failure, substitutional therapy, estrogens, should relieve all patients who have surgical or radiation castration. This is not true and probably points to frequent psycogenic factors. These factors generally are demonstrations as mood of depression, sadness, hopelessness, self-condemnation, self-depreciation, errors of judgement and failing memory. These may be severe, with suicidal preoccupation of paranoid coloring. These manifestations are less dangerous in patients of 55 to 60 years of age. The mental states mentioned in this paragraph are properly treated by the competent neuro-psychiatrist, and are listed to further emphasize the obligation of a doctor who has such patients under his care to see that any departure from the normal in any bodily system is recognized and proper treatment begun. Even more desirable is the anticipation of related neuroses and psychoses so that very early treatment is possible. It is unfair and not in line with proper medical thinking to say that a female is fore-doomed to manic depressive psychoses. We grant the validity of prophylaxis in infectious diseases, malignancy and currently in the attention "child birth without fear," the same must be accorded this group of potentially sick and unhappy females. The scarcity and unavailability of any commodity has never been a deterrent to competent physicians. Such patients can be carried and helped until a competent psychiatrist is found.

Vasomotor Phenomena

In all probability vasomotor phenomena are the most consistent symptoms associated with the climacteric. The frequency and severity of these symptoms are used as criteria for diagnosis and treatment. Since these are the most frequent and disturbing symptoms, therapy should be directed toward their relief. The symptom "hot flushes" is so consistent and well understood that it requires no description. Sweating, dizziness, headache and sleeplessness are other symptoms. Uncertainty, a sense of impending tragedy and various inchoate states may result. These can and should be anticipated. In fact anticipation, explanation and preparation are the best therapeutic agents.

One should ascertain that he is actually dealing with symptoms of the climacteric. The keystone in therapy is making the woman acquainted with physiology of the process, an adequate stock taking, an explanation of what to expect, assurance of the temporary nature of the state, a discussion with the husband and adult members of the family and sincere assurance that you as a doctor and counsellor will be at hand for any service.

Psychotherapy

If our treatise is predicated on a sound basis the first therapeutic agent called for should be psychotherapy. Simplified, this means that we should take the time and trouble to make a definite diagnosis, rule out complicating factors such as malignancy, and that we sit down with our patient and devote such time to the discussion of her ailments as is necessary to put her mind at ease. When this is not enough we should resort to simple sedation and, in definite instances and under supervision, to organotherapy. In this event estrogens are the logical choice. They should be kept at a level as not to cause endometrial stimulation with resulting uterine bleeding. Our preference is to give them by mouth and in a dose lower than usually prescribed. Premarin orally or some other preparation in small doses may be given. Occasionally hypodermic medication may be required, but here again the dose should be held at its minimum. It is our feeling that one-tenth to one-half the recommended dose should give relief and would not be apt to cause uterine bleeding or influence the as yet unknown possibility of carcinogenesis. Estrogen medication can be habit forming. It is best given in small doses for 7 to 10 days, withheld for 1 to 2 weeks, then repeated. Again frank and free discussion will allow diminution of the agent.

Progesterone, in our hands, has been of little value in treating symptoms of the menopause. It is well to remember that muscle tone and sex steroid levels, especially the estrogens, have a relationship. There is a definite loss of tone and diminution in size of the organs, muscles, mucosa supporting structure of the pelvis. Pelvic repair or advice regarding repair should be influenced by this fact.

JOHN W. TURNER, M.D., and AUGUST B. TURNER, M.D., Atlanta

One Hundred Consecutive Partial GASTRECTOMIES for Benign PEPTIC ULCERS

This series is composed of the case reports of one hundred consecutive patients who have suffered from a benign duodenal or gastric ulcer and who have been subjected to partial gastrectomy. The gastric ulcers were considered as being primarily surgical lesions and those patients were operated upon unless they responded promptly to medical therapy. The duodenal ulcers were considered medical and those patients were operated upon for disabling chronicity, obstruction, for acute massive hemorrhage, or when a history of bleeding or perforation was obtained. Many of these patients requested surgery for the relief of persistently recurring pain which was not satisfactorily controlled by conservative therapy. No patient was operated upon who had not had a study of the gastrointestinal tract by x-ray, although there were a number of patients in whom large, fixed, posterior wall ulcers were found at operation, after repeated x-ray studies had failed to demonstrate a lesion.

TABLE 1

Gastric	Duodenal	Jejunal
24	73	3

TABLE 2

Age and Sex Incidence

Age — 27 years to 91 years.

Male ..... 77 Female 23

There were a total of 24 gastric ulcers, 73 duodenal, and three jejunal ulcers. Three of the gastric and nine of the duodenal ulcers were of the penetrating type and the base of the ulcer was formed by some contiguous viscus. The age incidence ran from 27 to 91 years of age; the oldest being a female who had three large gastric ulcers. Seventy-three of the reported cases were males and 23 were females.

Four of the patients in this series had had previous surgery for relief of their ulcer symptoms; two having had a posterior gastrojejunostomy and two having had a posterior gastrojejunostomy and a vagotomy. Of these, two had marginal or jejunal ulcers and the other two continued discomfort, one having been operated upon 15 years previously.

One patient suffered from a chronic obstructing gastric ulcer for which a vagotomy and posterior gastroenterostomy was performed in January, 1947. After two months the patient began to have more discomfort and returned to us for treatment. On Sept. 25, 1947, he had a severe hemorrhage; at this time he was hospitalized and he responded fairly well to conservative measures. X-ray study of the upper gastrointestinal tract on Nov. 22, 1947, showed "a markedly deformed duodenal cap and a large, penetrating, marginal ulcer on the medial aspect of the stoma at the gastroenterostomy"—the ulcer shown on the slide. In April, 1948, after continued disability, this patient was again operated upon. A Polya type subtotal gastrectomy with removal of three-fourths of the stomach was done, using the "Y" technique. After several months the patient again began to have trouble. At this time he was seen by another physician. X-ray on March 2, 1949, revealed probable ulceration of the efferent loop; gastric analysis on March 23, 1949, revealed a free acid of 0 and a fasting total acid of 5° which rose to 12° after

Read before the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 13, 1952.

an alcohol meal. The patient later had another massive hemorrhage in May 1949; he was hospitalized immediately and was subjected to surgery as soon as his condition permitted. At operation, a marginal ulcer 1 cm. in diameter was found; this ulcer had eroded completely through the line of anastomosis and its base was formed by the posterior, serosal surface of the transverse colon. There was no evidence of a fistula at this time. The ulcer was closed with continuous number 0 chromic catgut reinforced with interrupted number 000 black silk; this was covered by an omental tag sutured in place. On the patient's thirteenth postoperative day he made his fourth trip to the operating room where his wound dehisence was closed. After discharge from the hospital, the patient felt fairly well for several months, but he showed little or no weight gain and constantly complained of anorexia. In February, 1950, the patient began to vomit material which was very definitely fecal in character and he was again hospitalized. X-ray and barium enema demonstrated the fistulous tract between the transverse colon and the gastroenterostomy site. After several days of preparation the patient was again taken to the operating room where a portion of the transverse colon was resected; the gastroenterostomy site was resected and both large and small bowels repaired by end to end anastomosis. Reconstruction of the gastroenterostomy was ante-colic and of the Hoffmeister type. The last two major procedures were done at Grady Hospital by the house staff and the patient has been seen there from time to time since his last operation. The last notation on his chart indicates that he was fairly comfortable at that time but still complains of anorexia. Table 3 gives the indications for operation.

Table 3

Indications for Operations

Pain	4
Intractability	43
Hemorrhage, massive	2
Hemorrhage, history of	5
Perforation, history of	1
Obstruction	16
Penetration	12
Possible malignancy	17

In this discussion pain has been separated from intractability, knowing that pain is not generally considered as an indication for surgery; because, in the instances given, the pain was the driving force which led the patient to come seeking relief. In two cases chronicity was not associated with the pain. Severe pain, not relieved by conservative measures, which radiates "through to the back" arouses suspicion that the ulcer is of the penetrating type with the base being formed by the pancreas. The pain produced by a lesion of this type is usually rather constant and seldom responds to conventional conservative, therapy. Penetrating ulcers, regardless of the contiguous structure involved, produce a rather severe and often very persistent pain which is difficult to treat conservatively with any degree of satisfaction; if a crater has been demonstrated radiologically in this type of lesion it will usually persist even if the patient has responded to conservative measures.

Intractability does not mean, in the case of duodenal ulcer, simple chronicity, for most chronic duodenal ulcers do not require surgical intervention. Intractability, as used in this paper, refers to a condition which, in addition to chronicity, denotes remittant attacks of more or less continuous disability. One patient with a known duodenal ulcer of long standing showed a retention of 50 per cent of the barium meal after 18 hours, and this patient had not worked for 25 years. He now "makes a crop" each year and has sent us a fine ham every Christmas for the past five years.

Those patients who come to operation because of hemorrhage must be considered in two groups: (1) those who required emergency surgery because of acute massive hemorrhage uncontrolled by the customary active, conservative measures consisting principally of transfusion, coagulants, absolute bed rest, and sedation, and (2) those patients who gave a history of hemorrhage and were subjected to surgery during an interval. The first group represents the greatest risk and it is in such cases that the highest mortality is encountered. A definite criterion which would give us some indication as to which patient would enjoy a spontaneous cessation of his bleeding and which patient would demand operation is badly needed. Arbitrarily, it is considered that the patient under 45 years of age will probably not require surgical intervention. The literature does not emphasize the effect of the blood pressure level on bleeding. A patient who has a high blood pressure, even though he may be only 30 years of age, is more prone to have a massive hemorrhage than is a patient with a low pressure, just as a high pressure cerebral hemorrhage patient has less chance of survival than a patient with low pressure. It would seem logical to think that a patient who suffered from hypertension would be more prone to suffer from the complication of hemorrhage, but we have not noticed that this is true and have not seen a discussion of the effect of hypertension on the causation of hemorrhage from a peptic ulcer in the literature. There were two patients who were operated upon as emergencies, one of whom was 52 years of age. She felt weak and nauseated while riding the street car home from work. After getting off of the car she sat on the curb for 15 or 20 minutes before going home. She then proceeded to her home where she again became nauseated and subsequently vomited a small quantity of blood. The patient went to bed and telephoned us the following morning after another episode of hematemesis. This patient was sent immedi-

ately to the hospital where she was given morphia and repeated blood transfusions. She was seen in consultation with us by the late Dr. J. Edgar Paullin whose prognosis was very discouraging and who advised against operation. Despite active conservative measures and multiple transfusions the bleeding continued until the red cell count was less than one million and the hemoglobin 18 per cent. At this point conservatism was abandoned and a gastric resection was performed after rapid administration of 2000 cc. of cross matched blood. This patient was a known hypertensive with a systolic pressure of 175 mm. of mercury and a diastolic pressure of 110 mm. of mercury prior to the bleeding episode.

Although partial gastric resection is an extensive operation for a patient who is suffering from acute massive hemorrhage it is, in our opinion, the only procedure which deals definitely with the lesion which threatens the life of the patient and offers a satisfactory result in those cases in which surgical treatment is indicated. We can not agree with Reinhoff that ligation of the bleeding vessel, either by dissection or en masse by transfixion, is an adequate procedure. This interference with the blood supply to the lesion predisposes to the extension of the process to the adjacent tissue which has had its active blood supply decreased.

The patients subjected to operation because of perforation are not included in this paper. A patient who has an acute perforation should not be subjected to a partial gastric resection. Perforation has been given here as an indication for subtotal gastrectomy only because some surgeons have so considered it and it offers to the authors an opportunity to condemn the procedure for such a complication. A simple closure of the perforation is the simplest procedure which offers the patient the best chance of survival and the addition of other and more extensive surgery inevitably increases the mortality. The history of perforation, *per se,* is not an indication for surgical treatment. In fact, it has occurred to one of the authors (J. W. T.) that in many instances the perforation has had, for some unknown reason, a salutory effect upon the subsequent course of the disease.

Obstruction is usually found in patients of the older age group and it is these patients who were formerly most reluctantly subjected to a partial gastrectomy rather than a gastroenterostomy. Having a low total and free acid, securing such good results from operations which gave relief of the retention, and being poorer risks, they were the last group which were subjected to partial gastrectomy as the operation of choice. The low mortality of partial gastrectomy has persuaded us that they too are entitled to its benefits.

The percentage of so called penetrating ulcers is slightly larger than is commonly found in other series. These ulcers were those presenting a deep crater, the base of which was usually formed by some contiguous structure.

An ulcer classified as possibly malignant was a persistent gastric ulcer of large size. The usual percentage of error in these cases is from 10 to 18 per cent and that error is made because ulcers classified clinically as benign prove to be malignant. The fact that our error was in classifying as malignant a larger number than were found to be malignant can only be interpreted as meaning that we have been prone to consider most persistent gastric ulcers as malignant or that malignancy has not been found in a number of cases where it existed.



Table 4

Postoperative Complications

		Patients
1.	Bronchopneumonia	6
2.	Pulmonary atelectasis	4
3.	Wound infection	5
4.	Dumping Syndrome	4
5.	Postoperative hemorrhage	3
6.	Wound dehiscence	1
7.	Incisional hernia	2
8.	Peritonitis	4
9.	Fever of undetermined origin	2
10.	Duodenal fistula	2
11.	Persistent anemia	3
12.	Marginal ulcer	2
13.	Obstruction (internal hernia) Deceased	1
14.	Pulmonary embolus, Deceased	1



The complications subsequent to operation, as listed in Table 4, are most interesting. For an operation which one would ordinarily consider so formidable the postoperative course is usually very uneventful and the complications comparatively few. We frequently send these patients home on the fifth or sixth postoperative day. Bronchopneumonia and pulmonary atelectasis together constitute the most frequently observed postoperative hazards. Most of these complications occurred in the early part of this series when prolonged anaesthesia under sodium pentothal was used and less attention was given by the anesthetist to intubation and frequent aspiration of mucus, salvia and other materials from the tracheobronchial tree. Recently however, with the increased availability of the doctor-anesthetist and his proficiency in intubation and the selection of the anesthetic agent most suited to the patient and the contemplated surgical procedure, we have experienced, and can anticipate, much smoother induction, more satisfactory surgical anesthesia and consequently a convalescence freer from pulmonary complications. No spinal anesthetic was used in any patient in this

series although we have used spinal anesthesia satisfactorily in three cases recently. It is our definite opinion that a doctor anesthetist will afford the patient a better convalescent period with less complications. Although no mortality is recorded from these complications, they are serious.

The five instances of wound infections represent those cases in which it was necessary to evacuate pus from the subcutaneous tissues and do not include small stitch infections. None of these were serious but the infections were sufficient to prolong the patients stay in the hospital by four or five days and necessitated postoperative dressings after the patients were discharged from the hospital.

The dumping syndrome is a very distressing complication. Four patients experienced this discomfort; two males and two females. One male had no postoperative complication otherwise. After about five years the condition cleared up and he is now fat and healthy. The second male accounts for three of the classified complications; a dumping syndrome, a duodenal fistula, and a persistent hypochromic anemia. He is still suffering from the dumping syndrome and the anemia. The females were both seriously ill. One of these patients was the patient cited above who was operated upon for acute massive hemorrhage. The other, after four days of easy convalescence, began to vomit everything given by mouth. She was given barium, and the x-ray study revealed an obstruction at the gastrojejunal anastomosis. Although the initial vomiting was somewhat late to be due to edema this was considered the most probable cause. The vomiting persisted and she was taken back to the operating room. A laporotomy was performed and upon exploration, the omentum was found encircling the suture line at the site of the stoma. The omentum was very edematous and this swelling had closed the anastomotic opening. The omentum was peeled from the suture line and a very small opening, with leakage, was found through theh anterior suture line. There was no further vomiting and her convalescence was uneventful subsequent to this operation. The dumping syndrome seems to be recalcitrant to conventional treatment. This syndrome, in our experience seems to be most severe following the ingestion of sweets. Suggested therapy of sedation, antispasmodics and small, frequent meals have afforded little relief in most cases.

Postoperative hemorrhage sufficient to cause concern was manifest by three patients. In one instance it was alarming. Laporotomy for control of hemorrhage was seriously considered. These three patients were given repeated transfusions and sedation; no fatalities were experienced. To avoid a recurrence of this complication, all vessels of appreciable size involved in the resection are ligated with an encircling silk suture. There has been no excessive bleeding since this procedure has been adopted as routine technique.

Dehiscence with evisceration occurred in one patient, and a secondary closure was done. Two other patients had muscle and fascial separation and developed incisional herniae. Patients whose ulcer has interfered with adequate nutrition or who are very stout should be closed with additional tension sutures of some non-absorbable material. The small amount of additional time is a small premium to pay for this insurance.

Acute generalized peritonitis occurred in one patient. Localized peritonitis occurred in the two patients with duodenal fistula and in the case of leakage along the anastomotic line. Probably unrecognized peritonitis of a minor degree occurs in a much larger percentage of cases. Except for the routine use of antibiotics, serious peritonitis would certainly have occurred more often. Penicillin is started the day before operation and is continued until the fifth postoperative day.

Duodenal fistulae occurred in two patients. These fistulae occurred in the earlier cases at which time the duodenal stump was closed with two layers of "0" chromic catgut only. Subsequently, reinforcing sutures of black silk have been used over the outer chromic suture line and the closed stump sutured to the adjacent head of the pancreas. The development of the fistula in each instance was preceded by pain in the epigastrium with rigidity and signs of fluid accumulation; a probe inserted through the suture line was followed by the escape of bile stained fluid which continued to drain. The presence of pancreatic secretion was manifested by erosion of the skin giving a wide, very sensitive, raw area. Various recommended remedies were tried but in spite of the alkalinity of the pancreatic secretion and that, theoretically, it was not indicated, a weak bicarbonate of soda solution afforded the patient more relief than any other application. These fistulae closed spontaneously on conservative therapy; one after about three months and the other after six months. One of these fistulae, the one which persisted for six months, closed frequently and was reopened or opened spontaneously because of accumulated fluid, before final permanent healing occurred.

Two patients had fever of undetermined origin of as much as 102 F. running for three days or more.

In this series there are three patients who have a persistent hypochromic type of anemia, the hemoglobin (photo-electric coloremeter) being stabilized between 60 and 70 per cent. This anemia is very stubborn and does not respond to conventional therapy with iron, B_{12}, or liver extracts. Blood transfusion benefits these patients for a short period of time, but their anemia recurs. These three patients are the same three who continue to suffer from the dumping syndrome and it is probable that the cure of this condition will also play a large part in relieving the anemia.

Each of the last two complications listed in table 4 was responsible for the death of a patient. Herniation of the jejunum through the opening in the transverse mesocolon adjacent to the stump of the stomach caused an obstruction which was recognized in sufficient time to have been remedied without serious damage. The patient, however, developed a rather extensive atelectasis and died within 36 hours. As an error in technique was the activating cause of death

and as this classification will not let us forget, it is so classified.

The patient who expired from a massive pulmonary embolus stated her age as 82 years when she was referred to us. A large gastric ulcer which was thought to be malignant and also an obstructive lesion of the pylorus were demonstrated by x-ray. A subtotal resection was performed. The patient stood the procedure well and was up in a chair on the third postoperative day. It was noted shortly thereafter that the patient had developed some cardiac arrhythmia and the referring physician was asked to see her. He found it necessary to return her to the bed. On the tenth postoperative day the dressing was removed and on the twelfth postoperative day she was again up in the chair when she became cyanotic and expired. After her death we learned from her sister that her actual age was 91 years; she had married a man whom she taught in the first grade when he entered school and she had subtracted nine years from her age.

Pathological examination of the specimen revealed three gastric ulcers all located on the lesser curvature; one was very large and of the penetrating type located high on the stomach; one was at the antrum and was responsible for a cicatricial stenosis of the pylorus; the third was located at about the middle of the lesser curvature.

Summary

This series of 100 consecutive patients subjected to subtotal gastric resection for benign duodenal or gastric ulcers with a mortality of 2 per cent represents an objective analysis of the indications for operation and the complications we have encountered in handling these patients. Our indications for operation are listed in table 3 as are the number of patients operated upon for each of the tabulated indications. It should be pointed out here that in some instances one patient presented more than one of the operative indications and in these cases the patient was classified under the most prominent presenting indication. Table 3 lists the postoperative complications and the number of patients who suffered from each of these. We should be ever mindful of these complications and make every effort to prevent their occurrence. When complications do develop it is important that we recognize them early and treat them actively and adequately.

Conclusions

In conclusion we would like for you to know that we have been as critical and as objective as possible in the evaluation of the disease, the treatment, and the complications of these 100 patients with the hope that someone may benefit by our observations.

Review of Two Hundred Cases

Early Diagnosis and Treatment of CONGENITAL DISLOCATION *of the* HIP

The purpose of this paper is to make a plea for the early diagnosis of congenital dislocation of the hip. It is hoped that it will be of service to the general practitioner and the pediatrician who are the ones having the opportunity and the responsibility of making the diagnosis. The clinical and roentgenographic signs will be described in order to assist in making the early diagnosis.

Some of the signs to be described have appeared in recent orthopedic literature, but have not as yet made their appearance in the latest orthopedic and pediatric text books, so are not readily available.

Read before the Section on Industrial Surgery and Trauma of the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 14, 1952.

J. HIRAM KITE, M.D., and *RICHARD E. KING, M.D.*, Atlanta

The latest concept of congenital dislocation of the hip is that it is a lack of development of the acetabular rim. This is the primary condition. Following this defect, the head may slip out a little way, and be called a congenital subluxation, or it may slip all of the way out of the acetabulum and be a true luxation or dislocation. This defect of the acetabulum is spoken of as a congenital dysplasia of the hip. The dysplasia can be inherited and has been shown to run in families.[1] There is a gene for dysplasia but not for dislocation of the hip. Since the deformity is primarily in the roof of the acetabulum, the dislocation may occur before birth, or at a variable time after birth.

Clinical Signs at Birth

One of the reliable signs of a dysplasia or dislocation of the hip can be demonstrated at birth. The baby is placed flat on its back and the hips are flexed to ninety degrees and the thighs abducted. If the hips are normal the thighs can be spread apart until the knees approach the table. If the hip is dislocated, there will be a resistance on that side, and the leg will be stopped by the contracture of the abductor muscles.

Ortolani's sign: In the day-old baby the hip may be reduced by gentle pressure and a click may be heard as the head slips into the acetabulum. This "jerk of entry" and "jerk of exit" has been described by Ortolani. It is found only in the new borns. It can be elicited later under anesthesia.

Hart[2] has shown that the diagnosis can be made by accurate observation. If the baby is suspended by the shoulders and the legs allowed to hang, the shortening or contracture of the adductor muscles will cause a slight flexion, adduction and medial rotation of the leg. The slight adduction of the leg will give a tilt to the pelvis. If the hip is dislocated, a slight shortening can be detected. There is an asymmetry of the labia, and inguinal folds. These are deeper on the affected side and displaced upward towards the head. There is an extra fold in the thigh, and the creases at the knee and ankle are at a slightly higher level. An extra fold in the thigh is suggestive of dislocation but it does not make the diagnosis. It is frequently seen in normal hips.

If the femoral head is dislocated, there may be a slight prominence on the lateral aspect of the hip. If both hips are dislocated the pelvis appears broader than normal. Decreased motion in one leg should make one suspicious of dislocation of the hip.

Probably the most reliable sign is "telescoping". With the hip flexed to a right angle, an attempt is made to pull and push the head of the femur along the side of the ilium. If the head is in the acetabulum, the hip is stable, but if it is out, the head can be felt to slip on the side of the ilium.

Another sign of some value which we have not seen mentioned, is to abduct the legs, and see if the midline of the femur seems to point toward the center of the acetabulum or at a slightly higher level, above the acetabulum.

Clinical Signs After the Patient Is Old Enough to Walk

The child with a dislocation of the hip is slow in walking. The delay is from two to four months. When the child does walk it is noticed that there is a limp. Soon there is the typical duck-like waddle.

The Trendelenburg test is positive. When the child stands on one leg, if the hip is dislocated, the pelvis drops to the opposite side and the child cannot hike this side of the pelvis. The dislocated hip is displaced backward producing a lumbar lordosis. This is more marked if both hips are out. The lordosis is accompanied by a corresponding protrusion of the abdomen. One leg being shorter, there will be a "C" curve to the spine.

Allis Sign: Place the child flat of its back and flex the hips to a right angle, and observe the level of the knees. If the hip is out the knee will be at a lower level.

With the legs in extension, the examiner may place his thumbs on each anterior superior spine and the fingers on the trochanters and determine if one trochanter is at a higher level. This determination is difficult if the baby is fat and struggling, but is of value with practice. Measurement of the legs will show a shortening on the side which is dislocated

Roentgen Signs

The roentgenogram shows dysplasia of the innominate bone on the effected side, with a tilting of the pelvis and a slight adduction of the femur. The most striking finding is a lack of development of the cartilaginous roof of the acetabulum, so that the slope or acclivity of the acetabulum is greater than normal.

Putti[3] has recommended that the hips of all infants be x-rayed. It is difficult to tell by x-ray whether or not a hip is dislocated before the centers of ossification for the heads have appeared. In order to better interpret the films, certain lines are drawn.

A horizontal line is drawn through the clear areas in the depth of the acetabula which represent the triradiate or "Y" cartilages (Fig. 1). This is called the "Y" line, or horizontal line or Hilgenreiner's[4] line. A second vertical line (Perkins) is drawn through the outer edge of the acetabular rim. Quadrants are formed where these lines cross. In the normal pelvis the capital epiphysis is in the lower medial quadrant.

The acetabular index is measured by the angle formed by the junction of the horizontal line with a line passing through the depth of the socket at the horizontal line and the lateral border of the acetabular rim (Fig. 2). The normal acetabular index at two years of age is about 20 degrees. If above 30 degrees, a dislocation will probably develop.

Shenton's line in a normal hip is an even arc formed by the medial border of the neck of the femur and the superior border of the obturator foramen (Fig 1). This line is broken and interrupted if the femoral head is displaced. If the center of ossification for the head has not appeared, the upward displacement can be measured from the spine of the diaphysis of the neck to the horizontal

Fig. 1. Roentgen diagnosis of dislocation of the hip is difficult in early cases. Lines may be drawn to assist in the diagnosis. A horizontal line is drawn through the triradiate cartilage and a vertical line is drawn through the outer edge of the acetabular rim. In the normal hip the center of ossification for the femoral head is in the lower medial quadrant. If the head is dislocated it is above the horizontal line and lateral to the vertical line. In the normal hip there is no break in Shenton's line. The dislocated left hip shows the break.





Fig. 2. The slope or acclivity of the roof of the acetabulum favors the slipping out of the head. The "acetabular index" is measured by the angle formed by the junction of the horizontal line with a line passing through the depth of the socket at the horizontal line and the lateral border of the acetabular rim. The normal is about 20 degrees.

line and compared with the other side. Lateral displacement may be measured from the spine of the femoral neck to the ischium or floor of the acetabulum, and compared with the opposite side.

The appearance of the center of ossification for the femoral head is delayed on the dysplastic side. The head normally appears between two and eight months. The delay varies from several months to several years. The delayed closure of the ischiopubic juncture or synchondrosis is a constant dysplastic feature. The "U" figure or tear drop is indistinct or distorted in a dysplastic hip. The acetabular roof is poorly defined.

A slight tilting of the patient will cause an apparent asymmetry of the pelvic bones and a flattening of the acetabular depression on one side. Because of the difficulty in making the diagnosis shortly after birth it is recommended that an anterio-posterior view be made with traction on one leg and pressure upward on the other leg. The pull is reversed for the next exposure.

In our experience one of the most helpful procedures is to make a roentgenogram with the legs abducted as widely as possible. The midline of the femur which is dislocated will point above the center of the acetabulum.

A review has been made of two hundred cases of congenital dislocation of the hip, which have been treated at the office and at the Scottish Rite Hospital. There were 41 males (20.5%) and 159 females (79.5%). Sixty-nine cases were bilateral (34.5%) and 131 were unilateral (65.5%). Of these unilateral cases 59 involved the right hip (29.5%), and 72 the left hip (36.0%).

In studying the results of treatment in congenital dislocation of the hip it is obviously necessary to separate the cases which occur in arthrogryposis and spina bifida from the common variety of dislocated hips. In the two hundred cases there were seventeen patients with arthrogryposis multiplex congenita. Nine of these also had clubfoot deformities. Seven showed spina bifida and five of these had clubfeet. There were six cases with absence of parts or multiple deformities. Three of these had clubfeet. In these two hundred cases there were four with spastic paralysis. The adduction deformity present in these cases tended to cause a redislocation of the hips. One case had syndactylism of the hands. In the common variety of hip dislocation there occurred 7 cases with clubfeet and three with metatarsus varus. Seventeen of these 35 cases with additional deformities, or approximately one-half of these had clubfoot. For the entire series there were 24 cases with clubfeet, or 12 per cent. When we consider dislocation of hips without the other deformities only seven, or 4.2 per cent, had clubfeet. This is in disagreement with the findings of Hawkins[5] who reports six cases, with a quotation from the literature that 55 per cent of congenital dislocated hips have clubfeet.

Treatment

The earlier the diagnosis can be made and the earlier the treatment can be begun, the better will be the final result. In the early stage the hip can be reduced and the position maintained by the use of a Putti apparatus or a pillow described by Frejka of Czechoslovakia. These abduction splints can be used by the mother at home, and eliminates hospitalization, anesthesia, manipulation, and plaster casts. This



Fig. 3. After reduction of the dislocated hip, the spica is applied with the legs in a neutral position as regards rotation, instead of outward rotation. The flexed lower leg points toward the floor, which makes it necessary to keep the child on an elevated frame. This makes nursing easy.



Fig. 4. The patient is kept over the opening in the frame and can be cared for equally as well on the abdomen. The acetabulum and femoral head are being molded to the position they will occupy when the patient begins to walk.

pillow fits firmly between the flexed thighs from knee to knee. No manipulation or stretching is used. The pillow abducts the flexed hips instead of the extended hips as in the Putti apparatus. The pillow is lengthened as the baby grows. The hips are checked by X-ray monthly. The treatment lasts for three to six months, or until the hip is stable and the roentgenogram shows an adequate acetabular roof.

In a complete dislocation seen late, neither of these will reduce the dislocation. The late cases will require an anesthetic and a plaster spica. The details of the various techniques of reduction are given in orthopedic texts and need not be repeated here. In practically all texts the hip is immobilized with the leg in ninety degrees outward rotation. The femur is abducted ninety degrees at the hip and the knee is flexed to ninety degrees and the leg is outwardly rotated so that the lower leg is flat on the bed. It has been our custom for the last 25 years to put the leg in neutral rotation. This is a more stable position and is followed by fewer recurrences. We prefer to place the legs in about seventy-five degrees abduction instead of ninety. It relieves some of the strain on the head from the tight muscles, and lets the pressure come on the roof of the acetabulum as well as on the floor of the acetabulum. The knees are flexed and lower legs point toward the floor when the child is on its back (Fig. 3). This makes it necessary to place the child on an elevated frame, which makes nursing easier. The child is placed over an opening in the frame, and in this way the cast is kept dry. The patient may be turned and cared for equally as well on the abdomen as on the back (Fig. 4).

The spica is changed every 6 to 10 weeks, depending on the age of the child and the rapidity of growth. When the cast is changed, the position is checked with x-rays and the legs brought a little nearer the midline. This position of abduction is maintained for 5 to 7 months. If the roentgenograms show a good acetabulum the spica may be left off at five months and a Ponseti[6] bar used for several months longer at night.

Treatment in Older Children

Traction is used in the older children to pull the head down before attempting reduction. Children over three years of age may need an open reduction. When anteversion is marked, a rotation osteotomy is done. In the still older age group where the roof of the acetabulum is poorly developed, a shelf operation may be necessary to hold the head in the acetabulum. Patients treated late, or untreated adults may develop a traumatic arthritis and may need a cup arthroplasty or an arthrodesis of the hip.

None of these procedures in older patients give as good results as desired. Therefore it is most important that the diagnosis be made early, and treatment given as soon as the diagnosis is made.

Summary

A plea is made for early diagnosis of congenital dislocation of the hip. Early treatment gives excellent results. Late treatment gives poor results. The early diagnosis can be made clinically by the inability to abduct the dislocated hip. Ortolani's sign, asymmetry of position and folds in the leg, telescoping and palpation all add to the certainty of the diagnosis. The dislocated leg is moved less. The child is slow in walking and walks with a limp and a duck-like waddle. Trendelenburg sign is positive in the older patient, and there is lumbar lordosis and a curve to the spine. Roentgen signs show a dysplasia of the innominate bone with failure to develop an acetabular rim. The center of ossification for the femoral head is late in developing and is displaced lateralward and upward. Shenton's line is broken. The view with the legs abducted, shows the midline of the femur pointing above the acetabulum if there is a dislocation. The early cases can be corrected by holding apparatuses. Cases seen late require anesthesia and

spicas. Still later cases require operations. The best results follow early non-operative treatment.

REFERENCES

1. Hart, V. L.: Primary Genetic Dysplasia of the Hip With and Without Classical Dislocation, J. Bone & Joint Surg. 24:753 (Oct.) 1942.
2. Hart, V. L.: Congenital Dislocation of the Hip, The American Academy of Orthopaedic Surgeons Instructional Course Lectures, Ann Arbor, Mich., J. W. Edwards, 1950, vol. 7, p. 107.
3. Putti, V.: Early Treatment of Congenital Dislocation of the Hip, J. Bone & Joint Surg, 11:798 (Oct.) 1929.
4. Hilgenreiner, H.: Zur Angeborenen Dysplasie der Hufte, Ztschr. f. Orthop. 69:30, 1938.
5. Hawkins, R. D.: Congenital Dysplasia of the Hip Joint in Early Infancy, South. M. J. 45:18 (Jan.) 1952.
6. Ponseti, I.: Causes of Failure in the Treatment of Congenital Dislocation of the Hip, J. Bone & Joint Surg. 26:775 (Oct.) 1944.

DISCUSSION

DR. PETER B. WRIGHT (Augusta): I would like to stress the extreme importance of early recognition of congenital dislocation of the hip. As in other congenital deformities such as clubfoot, the earlier treatment can be instituted, the better is the prognosis. It is debatable whether the slanting acetabulum is due primarily to faulty formation of the bony elements or primarily to laxity of the capsule allowing abnormal pressure of the head against the roof of the acetabulum. Regardless of which theory is correct, the capsule is most often the obstructing element to reduction.

Bilateral dislocations of the hip are harder to diagnose than the unilateral ones. In the latter we have the normal hip for comparison. The skin folds in the inguinal region and the thighs give an important clue.

Dr. Kite has given in detail the diagnostic points, but I would like to again stress the value of Shenton's line in both bilateral and unilateral conditions. As for the treatment of these patients, it can readily be seen that in the very early cases no great difficulty is encountered. On the other hand, the older the case the more complicated is the treatment, with open reduction frequently being the only answer.

I, too, wish to make a plea for early diagnosis and early treatment of congenital dislocation of the hip.

The SURGICAL TREATMENT *of Residual* FIBROCASEOUS NODULES *in Pulmonary Tuberculosis*

*R. F. CORPE, M.D.,**

*W. H. KASSERMAN, M.D.,***

*H. T. RANDSELL, M.D.,****Rome

The term *residual fibrocaseous nodules* is rather broad and inclusive, and refers to pulmonary lesions that have reached a state of caseation with surrounding fibrosis. These lesions vary greatly, from pin-point side to several inches in diameter. They are often round and well circumscribed, but many other forms may be the residual end point of the incomplete healing of these parenchymal tuberculous lesions. A large number of synonymous terms have been used to describe such lesions. Probably the one most widely accepted is *tuberculoma,* although this is thought of primarily as a coin lesion.

In regard to the pathogenesis of these residual fibrocaseous nodules, we generally consider them as

*Chief of Surgery, Battey State Hospital, Rome.
**Resident in Thoracic Surgery, Battey State Hospital.
***Surgeon, Battey State Hospital.

Read before the Section Thoracic Diseases at the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 14, 1952.

having developed in one of the three ways brought out by Mahon and Forsee.[1] These lesions may be left behind after a rather extensive, tuberculous pneumonia, largely resolved under medical and antibiotic therapy, that ends up as a rounded or irregularly shaped area of fibrocaseous tuberculosis. Such areas may develop from the coalition of adjacent areas of exudative infiltration, or they may be the end result of filled cavities. These residual fibrocaseous lesions represest a concentrated effort of healing by the host. In almost all of the cases in this series, multiple therapeutic regimens have been tried.

Symptomatically, patients are often clinically well by the time they have what we term residual fibrocaseous lesions. Yet, with a fairly extensive bacteriological study of sanatorium patients' sputa, prior to and up to discharge, we find that a considerable number of patients will exhibit positive bacteriological evidence of the activity of their disease. A good therapeutic program in any tuberculosis sanatorium attempts to discharge patients consistently negative to all bacteriological methods of examination of sputum and gastric specimens. One must realize the hazard that any patient is to himself, from the standpoint of reactivation and future breakdown, when he is discharged from a sanatorium with positive bacteriological studies, not to mention the hazard to people who may be in close contact with the patient. Much has been written concerning the danger of these residual lesions because of the possibility of excavation and bronchogenic dissemination. We have all seen instances in which this happened. Yet, it is very difficult to know just how many of these lesions will reactivate or break down and cause bronchogenic dissemination. In this small series of cases, there are a number who might have been expected to have a bronchogenic dissemination of their disease in the future, in view of the pathological findings discovered.

When one undertakes major, elective, intrathoracic surgery on a group of patients who are all feeling essentially well, with only occasional positive findings in the sputum or gastric culture or inoculated animal, it must be with a certain amount of trepidation. If surgical excision of these lesions, either by wedge or segmental resection, or lobectomy, or combinations of these surgical procedures, is to play an important role in their management, it must be a safe procedure for these patients and bring about sputum conversion in a high percentage of the cases.

We should like to make a preliminary report on a small group of twenty-three consecutive patients with residual fibrocaseous nodules, attempting to show why these patients came to surgery, and the immediate results. Only time can tell what the late therapeutic results will be.

The ages of these patients were as shown in Table 1; three were in the age group of 15 to 20 years, eight were in the age group of 20 to 30, nine were in the age group of 30 to 40, and three were in the age group of 40 to 50. Nine of these patients were males; 14 were females. Seventeen of the patients were white and six were colored.

AGE, SEX, COLOR

Table 1

Age in Years	*No. of Patients*
15-20	3
20-30	8
30-40	9
40-50	3

Table 2

Sex	*No. of Patients*
M	9
F	14

Table 3

Color	*No. of Patients*
White	17
Colored	6

STAGE OF DISEASE AND SPUTUM STATUS ON ADMISSION

Table 4

Class	*No. of Patients*
Far advanced	5
Moderately advanced	17
Minimal	1

Table 5

Admission Sputum	
Negative	2
Pos. Culture	10
Pos. Direct Smear	11
Total Pos.	21

Admission classification of the patients' disease was as above; five were classified as far advanced on admission, seventeen as moderately advanced, and one as minimal. In two instances the patient's sputum was negative to all methods of bacteriological examination for acidfast bacilli. It was our preoperative impression that both of these patients had the so-called tuberculous, residual, fibrocaseous nodules, but the possibility of malignancy or other type of disease could not be ruled out, and both of these patients were operated on soon after their admission to the sanatorium. The sputa of ten patients were positive only to culture at the time of admission, and sputa of eleven patients were positive to direct smear. Altogether, 21 of the 23 patients had positive sputum on admission.

DIAGNOSTIC PROCEDURES

Table 6.—Bronchoscopy

Patients	*Examinations*	*Bronchitis*	*Stenosis*
23	46	6	2

Table 7.—Bronchogram

No. of Examinations	*Patients Examined*	*Bronchiectasis*	*Strictures*
14	12	5	2

Additional diagnostic methods that were used on this group of patients included skin testing, bronchoscopy, and bronchography. Every patient in the group had a positive intracutaneous test. In the preoperative workup of this group of 23 patients, every patient was bronchoscoped at least once, pre-

operatively. A total of 46 bronchoscopic examinations were carried out on this group of patients. Only six of the 23 patients showed evidence, bronchoscopically, of active endobronchitis, and two of them revealed stenosis. Bronchograms were also done on 12 patients. Two of these patients had two bronchograms each. According to the preoperative interpretation of the bronchograms, five patients revealed bronchiectasis in the region of disease that was later excised, and two of these patients showed stricture formation.

Table 8.—COLLAPSE MEASURES PRIOR TO SURGERY

Type of Collapse	*Number of Patients*	*Average trial in Months*
Pneumoperitoneum	15	17
Pneumothorax	7	17
Phrenic crush	8	17
Thoracoplasty	1	22
None	4	5½

These patients were all treated pre-surgically with standard medical procedures, consisting of bed rest for all and temporary collapse measures. Fifteen of the patients had pneumoperitoneum for an average trial of 17 months. Seven of the patients had received pneumothorax for an average trial of 17 months per patient. Eight of the patients had had an additional phrenic crush on the same side as their later operation. This phrenic crush also had been in effect for an average of 17 months per patient. One patient had had a thoracoplasty 22 months before he was subjected to excisional surgery. Four of the patients had had no preoperative temporary collapse measures.

ANTIBIOTIC THERAPY

Table 9.—Streptomycin Therapy & PAS
Number of patients receiving

None Preop	*Preop. Course*	*Postop. Course*
15	8	23

Table 10—Streptomycin Resistance at time of surgery

Partially resistant	4
Sensitive	2
Unknown	2

In addition to the previously mentioned types of therapy, eight of these patients had preoperative streptomycin and PAS for varying periods of time. Fifteen of the patients had no preoperative streptomycin and PAS and all of them had streptomycin and PAS in the postoperative period. For the eight patients who received streptomycin and PAS, preoperatively, primarily for active endobronchitis, the streptomycin sensitivity at the time of surgery is shown in Table 10.

Table 11

Endobronchitis	*Treated with Streptomycin*
Cleared	3
Unknown	1
Residual Stenosis	2

Table 12

Sputum	*Status immediately Preoperative*
Negative	4
+ Culture	12
+ Gastric	5
+ Direct smear	2

Of the six patients with bronchoscopic evidence of endobronchitis in the preoperative period who were subsequently treated with streptomycin and PAS, three patients exhibited clearing of the endobronchial lesions, two showed healing of their endrobronchitis with some residual stenosis, and one was not rebronchoscoped prior to surgery, owing to an obvious oversight.

Determination of the sputum status of this group of 23 patients in the immediate preoperative period of 3 to 4 months revealed that four of them were negative to all methods, 12 of them were positive to sputum culture, five were positive only to animal inoculation and culture of gastric washings, and two were positive to direct smear.



Table 13

Operation	*Indication*
Segmental resection	Residual fibrocaseous disease
Segmental resection and decortication	Residual fibrocaseous disease
Segmental resection	Residual fibrocaseous disease
Segmental resection	Residual fibrocaseous disease
Segmental resection and decortication	Bronchiectasis, fibrocaseous nodules
Segmental resection and decortication	"Tuberculoma," possible carcinoma
Lobectomy and wedge resection and decortication	Bronchiectasis and residual fibrocaseous nodules
Lobectomy	Residual fibrocaseous disease
Segmental resection, wedge resection and decortication	Residual fibrocaseous disease
Pneumonectomy	Disseminated residual fibrocaseous disease
Lobectomy	Bronchiectasis, multiple tuberculomata
Pneumonectomy	Thoracoplasty failure, bronchostenosis, bronchiectasis
Lobectomy	Multiple tuberculomata
Lobectomy	Tuberculoma
Segmental resection	Tuberculoma
Lobectomy	Tuberculoma
Lobectomy	Residual filled cavity
Wedge resection	Residual fibrocaseous primary focus
Lobectomy	Discrete fibrocaseous residium of tuberculous pneumonia
Lobectomy	Residual fibrocaseous disease
Lobectomy	Multiple fibrosaseous areas with probable cavity, right upper lobe. Tuberculoma, right middle lobe
Segmental resection	Extensive fibrocaseous disease. Questionable small cavity
Lobectomy and segmental resection	Multiple fibrocaseous areas

Table 14—*Type of Surgery*

Segmental resection	10
Lobectomy	11
Pneumonectomy	2
Decortication	5
Wedge resection	3
Total	31

Table 13 shows what the preoperative clinical indications for surgery were in each patient and also what type of resection was carried out.

There were ten segmental resections, eleven lobectomies, two pneumonectomies, five decortications, and three wedge resections. Thirty-one [surgical?] procedures were combined in these 23 operations. In some instances several forms of surgery were used on the same patient.

The Use of Thoracoplasty

In addition to the resections, a total of ten additional operations were performed on this group of patients. It has been our aim to attempt to tailor the chest to fit the remaining lung parenchyma so that overdistention of remaining lung will not occur. We have performed preresection thoracoplastics on patients when we have felt it was probable that the patient would need the chest size diminished, and then we have completed the thoracoplasty at the time of the resection on some of these patients. However, we have also performed three stages of thoracoplasty, postresection, in this group and have had to perform one partial scapulectomy. A total of 33 major operative procedures were performed on 23 patients.

Table 15—*Postoperative Complications*

1. Diaphragmatic pleurisy with effusion	24 hrs. postoperative
2. Delayed shock	10 hrs. postoperative

The postoperative complications: (1) Diaphragmatic pleurisy with effusion following a left lower lobectomy. This patient's pain subsided within 36 hours and she had such a small amount of fluid that aspiration was not necessary and the fluid was absorbed gradually over a period of several months, postoperatively. One other patient, (2) following a right upper lobectomy, went into delayed shock, 10 hours postoperatively, and required immediate transfusion. He reacted favorably and had no further difficulty. There have been no deaths in the group up to the present time. There have been no contralateral or ipsilateral spreads of reactivations and no stump blow-outs or empyemas up to the present time. Only five of this group of patients had preoperative x-ray evidence of contralateral disease, all of which could be classified as minimal.

Table 16—*Pathology*
Pathological Findings

Residual fibrocaseous lesions	23
Size	Minute to 5 cm.
Endobronchitis	4
Bronchiectasis	3
Endobronchitis and bronchiectasis combined	3

We are indebted to Dr. Ingrid Stergus, pathologist at Battey State Hospital, for the pathological interpretation of all resected specimens and also for the bacteriological work done on the pathological specimens. All 23 of the resected specimens revealed residual fibrocaseous lesions, ranging in size from minute lesions up to lesions measuring 5 cm. in diameter. Many of the resected specimens revealed multiple areas of residual fibrocaseous disease. Four resected specimens revealed, in addition to the fibrocaseous lesions, the presence of active endobronchitis; three showed bronchiectasis; three had endobronchitis and bronchiectasis combined.

Table 17—*Pathological and Bronchographic Correlation*

BRONCHOGRAPHIC DIAGNOSIS	PATHOLOGICAL DIAGNOSIS
Yes	Yes
Yes	Yes
Yes	Yes
Yes	Yes
Yes	No
Not done	Yes
No	Yes

An attempt was made to correlate the pathological findings on the resected specimens with the preoperative bronchograms. According to our preoperative interpretation of the bronchograms, we felt that five showed signs of bronchiectasis. According to the pathological interpretation of the specimens, six resected specimens showed evidence of bronchiectasis. There was agreement between the bronchographic diagnosis and the pathological diagnosis in four instances. One patient with pathologic evidence of bronchiectasis had not had a bronchogram. Another patient's bronchogram did not seem to us to indicate bronchiectasis, but the pathologic study revealed bronchiectasis. Still another patient exhibited what we considered to be evidence of bronchiectasis on the bronchogram, but his pathological specimen did not reveal bronchiectasis.

Table 18—*Bacteriologic Studies on Resected Specimens*

Patient	Preoperative Sputum	Pathological Specimen Direct smear	Pathological Specimen Culture	Postoperative Sputum
N.T.A.	—	Not done		—
M.B.	—	+	+	—
M.B.	+	+	—	—
L.B.	+	+	+	—
E.C.	—	+	+	—
E.D.	+	+	—	—
A.F.	+	+	+	—
R.F.	+	Not done		—
A.L.G.	+	+	—	—
B.H.	+	+	—	—
A.H.	+	+	+	—
R.J.	+	+	+	—
E.M.	+	Not done		—
L.M.	+	+	+	—
C.J.M.	+	+	—	—
N.M.	—	+	—	—
E.P.	+	+	+	—
J.R.	+	+	+	+ (2 out of 5 cultures)
R.R.	+	+	Not done	—
E.S.	+	+	+	—
F.T.	+	+	+	—
L.T.	+	+	+	—
M.W.	+	+	+	—

Table 18 gives the results of the bacteriological studies carried out on the pathological specimens. For three patients in the group, bacteriological studies were not carried out on the resected specimens. For 20 patients, such bacteriological studies were done. All of these 20 specimens were positive to direct smear. Unfortunately, one positive direct smear was not subsequently cultured. Nineteen pathological specimens that were positive to direct smear were cultured, and of these 13 yielded positive cultures and six failed to give viable organisms. Five of the six patients whose specimens failed to produce viable cultures were positive preoperatively. Only one of the patients whose specimen failed to yield viable organisms had received antibiotics preoperatively. Probable errors in the technique of selecting material and transplanting it from the surgical specimen to culture media may have given false negative results. If the concentration of antibiotics given for a few days preoperatively could be held responsible for this, it is hard to see why the other specimens gave viable organisms.

Postoperative Evaluation

As we have stated previously, this is only a preliminary report in regard to the postoperative evaluation of this small group of patients. A longer period of time will have to elapse before we can adequately judge this study. One can see from Table 18 that one of the 23 patients is still positive. This patient was only recently re-bronchoscoped and revealed a Grade II endobronchitis involving the contralateral upper lobe orifice. This is, in all probability, the explanation for his positive sputum. There is no roentgenological evidence of disease in the contralateral upper lobe. Twenty-one of the 23 patients had positive sputum on admission to the sanatorium. Nineteen o fthe 23 patients were positive in the preoperative period. The two that were negative on admission remained negative throughout the study. Two of them converted completely prior to surgery, and now, in the postoperative period, 18 of the 19 patients that were positive have converted. The average length of follow-up on this group of patients is 7½ months at the present time. The shortest duration is 3 months (one patient). The longest follow-up is 20 months (one patient). At the present time, 18 of these 23 patients are still in the sanatorium under observation. Five have been discharged, only one of them on medical advice. Three of the five left against medical advice in the postoperative period and one was given a disciplinary discharge.

Summary

We have taken a small group of 23 consecutive resections. In every instance the preoperative indication for resection was residual fibrocaseous lesions. Two patients were subjected to resection without prolonged medical therapy because malignancy could not be ruled out. The other cases were treated medically and with temporary collapse measures for an adequate trial period. Only two patients had sputum conversion during this type of therapy. The diagnostic procedures and results are discussed. The type of surgery is outlined, and a review of the pathological findings and bacteriological studies on the resected specimens are given. The postoperative complications are listed. There was no operative mortality. Sputum examination has been consistently negative, postoperatively, in all but one patient. This patient has a small area of endobronchitis on the contralateral side.

This series of cases indicates that such patients may be subjected to excisional surgery with minimal morbidity and mortality, and a high rate of sputum conversion can be obtained.

REFERENCE

1. The Surgical Treatment of Round Tuberculous Pulmonary Lesions (Tuberculomas) Colonel Hugh W. Mahon (by invitation), and Colonel James H. Forsee, Army Medical Corps, Denver, Colo. J. Thoracic Surg. 5:724-40, (May) 1950.

ADRENOCORTICAL INSUFFICIENCY

Observed in Three Male Infants in One Family

M. HINES ROBERTS, M.D., Atlanta and *PAUL F. BAEHREN, M.D.*, Dayton, Ohio

Adrenocortical insufficiency in the neonatal period has been observed with increasing frequency in recent years. If this condition is accompanied by changes in external genitalia, the diagnosis may be quite obvious; but in the absence of such striking evidence of adrenal dysfunction, the symptom complex may prove most baffling.

The familial occurrence of endocrine disturbance has been often reported. Pseudohermaphrodism and precocious sexual development have been observed in sibships. A history of such cases in a family may suggest the correct diagnosis in a new-born exhibiting evidence of deficiency or absence of the adrenocortical hormone controlling electrolyte and water balance and/or carbohydrate metabolism.

The purpose of this paper is to present the case histories of three brothers who, in the neonatal period and infancy, exhibited a striking symptom complex which we feel undoubtedly must be attributed to adrenocortical insufficiency. Unfortunately, the laboratory data are entirely inadequate to establish this diagnosis, but in at least one autopsy the findings definitely warrant such a conclusion.

REPORT OF CASES

Case 1.—Joe D. was born on July 12, 1939. His father was 27 years old, his mother 24. Both were healthy young people with a family history entirely free of endocrine disorders or consanguinity.

The delivery was normal; birth weight was 7½ pounds. There was no difficulty with resuscitation and the baby's color was good. The breast was offered exclusively for 3 weeks; then on account of failure to gain, S.M.A. was given after the breast. At this age vomiting began and shortly became projectile in character. At 5½ weeks of age the infant was weaned and placed on Dryco. Vomiting became worse, stools were green; there was some cough. The patient was admitted to the hospital on Aug. 22, 1939, at the age of 6 weeks.

The physical examination revealed a poorly nourished, dehydrated male, weighing 6 pounds 15 ounces. There was no evidence of infection save a mild naso-pharyngitis with a catarrhal otitis on the left. The abdomen was distended with evidence of increased gastric peristalsis.

Blood examination was as follows: Hb. 105 per cent; RBC 5,240,000; WBC 17,150; N. 40 per cent; L. 40 per cent; Monos 10 per cent; Eosin 8 per cent; Myelocytes 2 per cent.

Urinalysis: sp. gr. 1005. albumin, trace; sugar, trace; acetone, negative; micro: oc.wbc.

X-ray study: Gastrointestinal series showed 40 per cent gastric retention at 4 hours, and 30 per cent at 6 hours.

Diagnosis on admission was that of pylorospasm or pyloric stenosis.

During the baby's stay in the hospital the striking symptoms were: 1st, persistent vomiting varying from one to 11 times daily, usually projectile in nature. Occasionally the vomitus was dark brown in character. There were only 14 days out of the 97 days comprising the total hospitalization on which he did not vomit. Frequently, the peristaltic pattern of stomach and small bowel was clearly visible.

2nd; recurrent and intractable dehydration, which might appear to respond favorably to parenteral fluid as indicated by increased weight and improved tissue turgor, but on cessation of administration of such fluid to recur rapidly to an alarming degree.

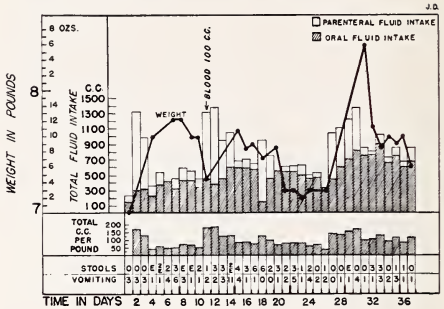
3rd; occasional periods of cyanosis and shock, characterized by weak irregular pulse and shallow respiration. Intravenous fluid and blood restored circulation to normal with disappearance of cyanosis.

Chart I presents graphically the infant's weight curve as influenced by fluid intake for the first 40 days of hospitalization. Daily oral intake is indicated by shaded area immediately above the base line. It will be seen that fluid intake by mouth in the early days of hospitalization was markedly inadequate, and although later it approached normal levels, as in the week of September 20, for the most part throughout the three months' stay it was insufficient.

The clear areas above the shaded area represent the amount of parenteral fluid employed. Unless otherwise indicated, the fluid was 5 per cent dextrose in Hartman's solution. If blood was given, the amount is shown as a figure above the hatched area. This was included in the total fluid intake graphically shown.

CHART I

ORAL AND PARENTERAL FLUID INTAKE WITH FLUCTUATIONS IN WEIGHT



The number of cc. of fluid intake per pound body weight for each day is shown in the legend below.

The weight curve is indicated by the heavy black line. The great fluctuations in weight seem chiefly to be in response to large amounts of parenteral fluid and were not influenced by vomiting, since this symptom was fairly constant. The stools varied from constipated to 1 to 3 soft stools daily.

X-ray studies of the gastrointestinal tract were quite variable. On August 22 there was 40 per cent retention at 4 hours, and 30 per cent retention at 6 hours. These findings seem to indicate a partial pyloric obstruction. However, studies made on September 13 and September 28 and November 9 failed to show evidence of gastric retention or partial intestinal obstruction.

Clinically, the type vomiting and peristaltic pattern were sufficiently characteristic to make the diagnosis of partial obstruction almost certain and the demand for surgery seem urgent.

The temperature curve was variable; however, infection for the most part was absent. An upper respiratory infection with resulting suppurative otitis occurred after the baby had been in the hospital for a period of two months. This condition seems to have no important bearing on the course of the baby's illness, nor the final outcome. At this time it was noted that the liver and spleen were somewhat enlarged, extending 3 cm. respectively below the costal margin.

The meager laboratory studies which were carried out were of little significance. A blood count on September 18 showed a Hb. of 80 per cent; RBC of 4,000,000; WBC 28,500; Polys 25 per cent; L. 70; M. 5; Eosin 1 per cent. On October 16 the WBC was 10,000 with Polys 35 per cent, L. 63 per cent, Eosin 2 per cent. Urinalyses were negative throughout for the routine procedures. The spinal fluid examination showed no abnormality; the Kahn was negative. Unfortunately, no studies were made for sodium and potassium value in blood or urine.

Therapy seemed of no avail except the immediate relief of dehydration, cyanosis and shock, afforded by intravenous fluid and blood. Many different formulae were attempted, including thick cereal feedings, goat's milk, breast milk, and milk substitutes, such as the soybean products; but there was no alleviation of symptoms.

The infant finally went into a state of collapse on November 24 from which he did not recover in spite of all efforts, including those of intravenous blood and saline, the measures which previously had resulted in a rapid temporary recovery.

Although an autopsy was obtained, the examination was inadequate. The pathologist's attention was directed chiefly to the gastrointestinal tract. The musculature at the pylorus was reported as firm and of cartilagenous consistency. The pyloric opening was sufficiently large to admit a pencil. The liver and spleen were somewhat enlarged. The kidneys were reported as normal. No mention was made of the adrenals. The examination otherwise was not important. No microscopic studies of tissue were available.

Case 2.—Kenneth D, born on April 15, 1943, was the third pregnancy. The second had resulted in a normal female who was now two years of age.

The labor was normal. Birth weight was 9 pounds and 6 ounces. The cord was found wound once about the baby's neck. Cyanosis was present immediately after birth, but soon cleared and did not recur. He never gained well. Breast feeding was employed exclusively until four weeks of age when, on account of vomiting and failure to gain, complementary feedings of evaporated milk were begun, but were taken poorly. The baby gagged frequently and vomited on several occasions. An x-ray of the chest at the time was said to indicate an enlarged thymus gland, for which irradiation was given.

At five weeks of age the infant was admitted to the hospital with a story of projectile vomiting the previous day, and choking while nursing.

His physical examination was essentially negative. He was fairly well nourished, although he weighed only 9 pounds—still 6 ounces under his birth weight.

The blood count was as follows: Hb. 16.7 Gm.; RBC 5,720,000, WBC 12,500; Polys 36 per cent; L. 55; M. 5; Eosin, 4. The urinalyses were negative except for an occasional trace of albumin. An x-ray of the chest, taken on admission, showed no pathology.

The child was placed on a low fat cow's milk formula, but took the food poorly and lost considerable weight the first few days after admission, in spite of subcutaneous saline and Ringer's solution. He vomited very little for two weeks; however, the symptom recurred in the third week. A gastrointestinal series at 8 weeks revealed no pathology. Subsequently the condiiton improved; the child gained weight steadily for several days without vomiting. He was dismissed from the hospital on June 13, 1943, but was re-admitted 3 days later on account of projectile vomiting of all feeding for the past 18 hours.

Physical examination again revealed a well developed and fairly well nourished infant weighing 9 pounds 1 ounce, without evidence of pathology.

Blood count was as follows: Hb. 13.2 gm.; RBC 4,030,000; WBC 15,800; Polys 42; L. 45; M. 3; Eosin 10.

Urine on one occasion showed a trace of albumin with an occasional fine granular cast. It was negative on many other examinations.

The infant was placed on a low fat cow's milk feeding, and seemed to progress fairly well for 4 weeks. Although there was practically no gain in weight, the baby's intake was fairly good; the stools seemed well digested, and vomiting occurred only occasionally and in small amounts.

CHART II

SHOWING WEIGHT CURVE BEFORE ADMINISTRATION OF ADRENO-CORTICAL EXTRACT AND SODIUM CHLORIDE

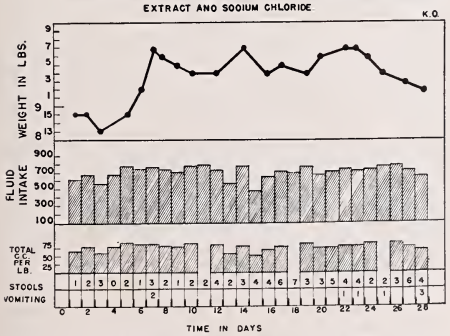


Chart II shows graphically the weight curve, fluid intake, amount of vomiting and number of stools during the period from June 17 through July 14 before administration of adrenocortical extract and sodium chloride. Daily oral intake is indicated by the shaded area immediately above the base line. The weight curve is shown in the graph at the top of the chart. Fluid intake in cc. per pound per day is indicated in the legend below.

His weight June 17 to July 14 had increased from 8 pounds 15 ounces to only 9 pounds 2 ounces. Due to the poor weight gain, goat's milk was attempted with an immediate increase in vomiting, rapid loss of weight and dehydration. The administration of normal saline and blood intravenously promptly restored the infant to his former status. The vomiting ceased after the parenteral fluids were given and the low fat cow's milk formula resumed. The weight rose from 8 pounds 14 ounces to 10 pounds during the administration of fluids, but quickly returned to 9 pounds although the oral intake was 600 to 750 cc. daily.

A gastrointestinal series, taken 2 days after the parenteral fluids were administered and when the infant was not vomiting, revealed no pathology.

Again a quiescent period ensued in which there was no vomiting for almost two weeks, then vomiting recurred, at first only occasionally, but gradually the symptoms became more severe although no change in therapy or feeding had been made. The infant's weight dropped to 8 pounds 10 ounces on August 11, about 3 weeks after the high of 10 pounds, which had been reached after the last severe episode of dehydration.

In view of the persistent projectile vomiting and loss of weight, and in spite of the apparently normal gastrointestinal series of a few weeks ago, an exploratory laparotomy was done on August 13. No definite pathology was found to explain the persistent vomiting.

Following surgery there was a stormy period of convalescence characterized by fever, vomiting, diarrhea and extreme dehydration, although intravenous fluids were administered in adequate amounts. Gradually the storm subsided, vomiting practically ceased, food intake improved and the baby resumed his desultory progress, but at a lower weight level. On August 28 he weighed only 8 pounds 2 ounces. The quiescent period was of only one week's duration, when vomiting became severe again, the baby rapidly lost weight to a low of 7 pounds 8 ounces on September 8.

On September 9 blood studies revealed a blood sugar of 58 mg. per cent; chloride 660 mg. per cent; N.P.N. 66.6 mg. per cent.

At this point adrenocortical extract, 1 cc., was given intravenously each day. For the first 3 days intravenous normal saline, 500 to 1,000 cc., was administered daily with a rapid rise in weight to 8 pounds 8 ounces.

On September 15 sodium chloride was added to the formula each day. Adrenocortical extract was continued. The weight on September 15 was 8 pounds 3 ounces. For the next two weeks there was a steady increase in weight without the parenteral fluids. The baby vomited only twice in the two-week period. On September 29 the weight was 9 pounds 5 ounces; the baby was taking 810 cc. of a whole cow's milk formula with 6 per cent added carbohydrate.

CHART III

EFFECT UPON WEIGHT OF ADRENO—CORTICAL EXTRACT (1 C.C. DAILY) AND SODIUM CHLORIDE

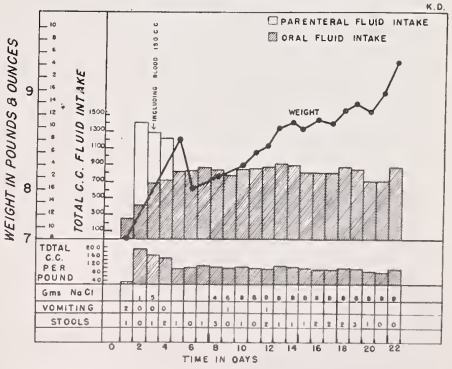


Chart 3 shows graphically the weight curve as influenced by adrenocortical extract and sodium chloride.

The great increase in weight from 7 pounds 8 ounces on September 8 to 8 pounds 8 ounces on September 12 obviously was due in the main to parenteral fluids; however, after the initial loss to 8 pounds, on withholding parenteral fluids, there was a steady gain of 21 ounces in 16 days when the baby was receiving oral feedings only.

Vomiting occurred on October 1, with loss of weight. Diarrhea began on October 5, for which sulfathiazole was given. The only change made in this period was the introduction of strained vegetables for 2 days.

On October 14 while getting cortin 1 cc. intramuscularly daily and 8 Gm. of NaCl by mouth, the urinary chloride for 24 hours was 8.6 Gm.

On October 18 the salt was reduced to 4 Gm. daily. The baby seemed better and gained from 9 pounds 4 ounces to 9 pounds 9 ounces. The following week the adrenal cortex was reduced by .1 cc. each day until the total amount was only .3 cc. The baby did well; gained 9 ounces and vomited only once.

The next week there was no gain, but he seemed in good condition. He was on 6 Gm. of NaCl daily and .1 cc. of adrenal cortex.

On November 10 the weight was 10 pounds 1 ounce. Vegetables were again attempted. Vomiting recurred. Adrenal cortex was increased to .5 cc. daily. It seems probable that had cortical extract been increased boldly, or desoxycorticosterone substituted, improvement would have continued. Unfortunately, this was not done. The baby went rapidly downhill and died on Nov. 20, 1943, in spite of parenteral saline and blood.

An autopsy was done 5 hours after death. The pertinent findings were as follows:

The thymus gland was somewhat smaller than one would expect at this age, and appeared normal. The heart and great vessels were normal. The lungs showed atelectasis and early bilateral broncho-pneumonia. The gastrointestinal tract revealed no gross abnormality except very large and prominent Peyer's patches. The pylorus was not thickened. The liver was not enlarged. The pancreas was normal. The spleen was normal in size and consistency. The cut surfaces showed hypertrophy of the lymphatic tissue.

The lymph nodes showed marked hyperplasia of the mesenteric nodes, some of which were moderately soft and pinkish in color; others were fine and white. The largest measured .7 by 1.0 cm. in diameter.

Brain and pituitary glands were removed and found normal. Kidney and urinary tract were grossly normal. Adrenals appeared normal in position, but greatly enlarged. The right measured 5 by 3.5 by 1.5 cm.; the left 5.5 by 3.5 by 2.

Case 3.—Alan, the third son, was born on May 22, 1946. The baby was a full term infant weighing 9 pounds 9½ ounces. The labor was normal, but the baby was cyanotic for several hours after birth. An x-ray of the chest was made on the third day of life; it showed moderate diffuse atelectasis.

The infant seemed to be progressing fairly well and was discharged from the nursery at 1 week of age. His feeding, at this time, consisted of breast and a complementary evaporated milk. During the following 2 weeks at home the patient took food poorly, the stools were obtained only by means of a suppository. Cyanosis of the lips and hands was frequently noted. Vomiting became persistent and severe 4 days before admission to the hospital, although it was not described as projectile. Respiration became rapid and there was mucus in the throat.

At 3 weeks of age he was admitted to the hospital. The baby was well developed but weighed only 8 pounds 4½ ounces. There was moderate dehydration. The lungs filled only fairly well; cyanosis was moderate. The heart showed no abnormality. Examination of the abdomen revealed a liver 2 cm. below the costal margin, and gastric and intestinal pattern suggested the presence of a partial obstruction high in the small bowel.

The blood count revealed a Hb. of 13.2 Gm.; the red blood cells numbered 5,990,000; the white blood count was 16,800, with polys 73 per cent, lymphs 25 per cent and mono 2 per cent. An x-ray of the chest showed rather extensive diffuse atelectasis. A barium meal indicated almost complete obstruction at the pylorus.

An evaporated milk feeding was begun after normal saline was given subcutaneously. The baby vomited only on 2 days during the first week of hospital stay. His formula intake varied between 12 and 18 ounces; his stools were soft yellow, varying in number from 1 to 3 each day. Moderate cyanosis was persistent with occasional severe attacks which were thought to be due to atelectasis.

During the second week the baby vomited once or twice daily; stools were normal, but food intake remained rather low and there was no gain. Cyanosis persisted in spite of oxygen. On June 25 at 6:00 a.m. the child suddenly went into a state of collapse and died within a period of 4 hours.

An autopsy revealed the following pertinent finding: Subcutaneous fat was absent, dehydration moderate. The thyroid gland was normal. The thymus gland weighed 6 Gm. and appeared normal.

The heart weighed 26 Gm. Foramen ovale was open, the valve being present on the left atrial side. The ductus arteriosus was patent, but was quite small, admitting only one blade of mosquito clamp. The myocardial thickness of the left ventricle was 1. cm., that of the right, .5 cm. No pathology was noted in the myocardium.

The lungs each weighed 20 Gm. The right lung showed congenital absence of the middle lobe. The bronchii were patent. There was extensive, lobular atelectasis.

Abdomen: The alimentary tract was patent in its entirety. The pylorus appeared thickened and measured 1.5 cm. in length. It was about the size of the distal phalanx of the little finger. The lumen was patent. The duodenum was normal; the jejunum flat, the terminal ileum distended. There was a marked redundancy of the large bowel with alternating areas of gaseous distention and fecal impaction. The pancreas weighed 10 Gm. and was normal.

The liver weighed 170 Gm. No pathology was noted. The kidneys weighed 20 Gm. They were normal. The remainder of the genito-urinary tract exhibited no abnormality.

The adrenal glands weighed 12 Gm. each. On gross examination they showed a markedly convoluted surface suggesting the appearance of cerebral cortex. On cut surface cortex and medulla were clearly demarcated. The cortex appeared thick and had a light tan color. Microscopic examination revealed a marked prominence of the reticular zone which comprised as much as 2/3 of the thickness of the cortex. The cells of the reticular zone appeared small and eosinophilic, but shwoed little evidence of involution. The zona fasciculata was readily recognized and appeared somewhat thinner than normal. The zona glomerulosa was poorly developed and only occasionally could be identified definitely.

Discussion

Although adrenocortical insufficiency was suspected in the three cases reported, the diagnosis was definitely confirmed in only one instance by autopsy. Unfortunately, adequate laboratory data are not available to permit an absolute diagnosis before death. Hemoconcentration, low blood sugar and elevated N.P.N. are suggestive findings. Sodium and potassium studies are not available on any one of these patients.

The symptomatology was strikingly similar in these babies and quite typical of the disease as described by many observers.

None of the infants gained properly. Anorexia was present in each case. Vomiting began at 3 or 4 weeks, became projectile in character and was sufficiently severe to suggest pyloric stenosis in each instance. Gastrointestinal series indicated partial obstruction at the pylorus in two of the infants, with normal pattern in one. Vomiting became so severe in case 2 that a laporatomy was done, but revealed

no pathology.

Cyanosis occurred in cases 2 and 3 at birth, with some evidence of atelectasis. Recurrent respiratory difficulty was noted in each infant at time of crisis and collapse, when cyanosis became marked.

Persistent and intractable dehydration was probably the outstanding manifestation in all three of the babies. Dehydration which failed to respond to adequate or even excessive parenteral fluid. Periods of cyanosis and circulatory collapse would occur at varying intervals and seemed to respond temporarily to large amounts of normal saline and glucose intravenously, only to lapse into a similar state when parenteral fluids were withheld.

Stools were variable, more often constipated than diarrheal, though occasionally in cases 1 and 2 there were 7 or 8 stools daily for a day or two. Certainly water and electrolyte loss by bowel could not account for the extreme dehydration which was almost constantly present.

The improvement observed in Kenneth, case 2, when placed on adrenocortical extract and sodium chloride was striking. During a three-week period there was a gain of almost two pounds; the baby vomited only twice, stools were normal and oral fluid intake was ample. It seems likely that had cortin been increased to adequate amounts, or desoxycorticosterone been substituted, possibly this infant might have survived—at least for a longer period of time.

None of the infants showed any evidence of increased pigmentation; no macrogenitosomia was evident; however, none lived longer than 7 months and 5 days, which was the age at which Kenneth, case 2, died. Joe, case 1, died at 4 months 12 days, and Alan, case 3, died when only 34 days of age.

Jaudon's review of "Addison's Disease in Childhood" revealed only three patients under the age of five years.[1] However, he has suggested the occurrence of a condition in the neonatal period characterized by temporary hypofunction of the adrenal cortex, resulting in disturbance of electrolyte and water balance without evidence of adrenogenital dysfunction.[2] Though the existence of such a syndrome may be controversial, the concept has proven stimulating. Certainly it is the experience of most observers who have reported true adrenocortical insufficiency in infancy that the deficiency is not temporary and, if the baby survives, ultimately evidences of virilism will appear.

A review of the case reports of adrenocortical insufficiency in infancy, of which there are increasing numbers, indicates that in the male macrogenitosomia almost invariably occurs, although its appearance may be delayed as late as four years of age.[3]

The case of Wilkins et al,[4] reported in 1940, showed evidence of enlargement not only of penis, but of scrotum at birth. The child died at 3½ years. Autopsy proved that the enlarged testes were composed almost entirely of aberrant tissue, resembling cells of the reticular zone of the adrenal cortex.

Butler, Ross and Talbot[5] reported their interesting case at about the same time. Macrogenitosomia appeared at the age of 2 months. Thelander and Cholffin's[6] case showed evidence of genital involvement at the age of 6 months. Darrow's[7] case showed increased hair on the face at 3 months and, at 6 months, pubic hair and large penis. Skelton[8] in 1945 added another case of adrenocortical insufficiency in a six-weeks old infant who apparently died in an adrenal crisis. Autopsy revealed the presence of congenital hyperplasia of the adrenals. There was no evidence of the adrenogenital syndrome.

Cases reported by Dijkhuizen and Behr[9] included 3 males, two of whom were brothers, and one female. One of the brothers showed an abnormality of genitalia described as perineal hypospadias and pseudohermaphroditism, the other exhibited no anomaly of genitalia. The 3 males all died within the first few weeks of life in what seems to have been adrenocortical crisis. The female lived to be 3½ months of age and, interestingly enough, exhibited no anomaly of genitalia.

Allibone, Baar and Cant[10] reported ten cases of adrenalcortical insufficiency observed during the newborn period: five of these were female pseudohermaphrodites; none lived longer than 82 days. Five were males, exhibiting the typical symptoms of this syndrome. None of these infants presented any abnormality of genitalia. None lived longer than 45 days. No chemical studies were reported. Autopsy revealed very large adrenals due to cortical hypertrophy. Five cases also showed atrophy of the thymus. The prostate was large in 3 cases.

Zuelzer and Blum[11] reported four cases of adrenocortical insufficiency, three female pseudohermaphrodites and one male with normal genitalia. Chemical studies suggested the diagnosis before death. The use of adrenal cortical extract, glucose and saline, although beneficial to certain of the infants, failed to save any of them. Death occurred at 7½ weeks in the male, and at 4½ months, 5½ months and 7 months, respectively, in the females. Autopsy confirmed the diagnosis in each instance.

Levine, Barnett and Tepper[12] reported the case of a male who came under their care at one month of age with symptoms typical of adrenocortical insufficiency. It was noted that the penis was rather large for the age. Chemical studies confirmed the diagnosis, and therapy proved successful. Large doses of desoxycorticosterone, adrenal cortical extract, sodium chloride and glucose tided the infant over a serious adrenal crisis. Subsequently it was found that desoxycorticosterone was the chief effective agent, and at four months the infant was in excellent health on a maintenance dose of 2 mg. daily of desoxycorticosterone acetate in oil, 3.5 Gm. of NaCl and .8 Gm. of sodium lactate. In a personal communication Dr. Barnett stated that this child is now over 2 years of age and shows marked virilism. It has been necessary to continue desoxycorticosterone and added sodium.

Deamer's excellent report included 4 patients suffering with congenital adrenocortical insufficiency who are alive at 4 years (male), 7 years 3 months (male), 3 years 2 months (female), and 3 years 3 months (female). Of the two males, one exhibited

adrenogenital phenomenon, the other showed no genital change at the age of 4 years. Two were female pseudohermaphrodites with virilism. It is interesting to note that the male, who, at the age of 4 years, showed no evidence of adrenogenital syndrome, seemed to suffer with a milder type of adrenocortical insufficiency than most of those reported in the neonatal period, and that the condition was much less dramatic in its manifestation than the three brothers included in this report.

The question of the adrenogenital syndrome as an invariable accompaniment of adrenocortical insufficiency is an interesting one. It is a well established fact[13] that the adrenogenital syndrome may exist without imbalance of water and electrolytes, and one wonders if the reverse may not be true. A review of the reported cases indicates that the female with adrenocortical insufficiency almost invariably shows pseudohermaphroditism, and/or virilism. The disease in the male, however, presents what at first glance appears to be a strikingly different picture. The majority of these infants dying in the early months of life have shown no anomaly of genitalia or virilism except that the penis seemed somewhat large for the age, according to an occasional statement. However, of the few cases which have been treated successfully and have survived, evidence of the adrenogenital syndrome has almost invariably appeared. Of the survivors, Deamer's case, which reached the age of 4 years without such manifestations, seems the only exception. It is possible, indeed, that virilism may still occur in this child.

As the diagnosis of adrenocortical insufficiency in the newborn becomes more accurate and its treatment more effective, undoubtedly many of these infants will survive, and this question of virilism will be answered finally and definitely.

Summary

The unique features of this report are the existence of three brothers exhibiting typical evidence of adrenocortical insufficiency, but showing no abnormality of genitalia or virilism. The family history was entirely negative. There was a normal sister who was the product of the second pregnancy.

These infants all died, although the second responded for a time to adrenocortical extract and sodium chloride. Autopsy proved conclusively the presence of congenital adrenocortical hyperplasia in the third infant.

A brief discussion of certain cases reported in the literature is given.

24 Fourteenth St., N.E. (Dr. Roberts).

BIBLIOGRAPHY

1. Jaudon, J. C.: Addison's Disease in Children, J. Pediat. 28:737, 1946.

2. Jaudon, J. C.: Further Observations Concerning Hypofunction of the Adrenals During Early Life, J. Pediat. 32:641, 1948.

3. Deamer, W. C., and Silver, H. K.: Abnormalities in the Secretion of the Adrenal Cortex During Early Life, J. Pediat. 37:490, 1950.

4. Wilkins, L.; Fleischman, W., and Howard, J. E.: Macrogenitosomia Precox Associated with Hyperplasia of Androgenic Tissue of Adrenal and Death from Cortico-adrenal Insufficiency, Endocrinology 26:385, 1940.

5. Butler, A. M., Ross, R. A., and Talbot, N. B.: Probable Adrenal Insufficiency in an Infant: Report of a Case, J. Pediat. 15:831, 1939.

6. Thelander, H. E., and Cholffin, M.: Neonatal Cortical Insufficiency (Addison's Disease) Associated with Adrenogenital Syndrome, J. Pediat. 18:779, 1941.

7. Darrow, D. C.: Congenital Adrenal Cortical Insufficiency with Virilism. Yale J. Biol. & Med. 16:579, 1944.

8. Skelton, M. O.: Bilateral Adrenal Hypertrophy in Infancy. Arch. Dis. Childhood 20:135, 1945.

9. Dijkhuizen, R. K., and Behr, E.: Adrenal Hypertrophy in Infants. A New Clinical Entity of the Neonatal Period Acta Paediat. 27:276, 1940.

10. Allibone, M. D.; Baar, H. S., and Cant, W. H. P.: The Interrenal Syndrome in Childhood, Arch. Dis. Childhood 22:210, 1947.

11. Zuelzer, W. W., and Blum, A., Jr.: Adrenocortical Insufficiency in Infants with Adrenogenital Syndrome, J. Pediat. 35:344, 1949.

12. Levine, Samuel Z., Barnett, Henry L., and Tepper, Warren: Congenital Adrenocortical Insufficiency with Virilism, J. Pediat. 34:768, 1949.

13. Broster, L. R., and Vines, H. W. C.: The Adrena Cortex: A Surgical and Pathological Study, London, Lewis 1933.

PRESS COMMENT: *Medical School Aid*

How to keep the nation's 79 medical schools going when prospects of further endowment grow slimmer and slimmer and the cost of educating a doctor rises to $7,000 more than he pays in tuition is a serious problem, indeed.

Fortunately for the medical schools, there is already established a National Fund for Medical Education, which last year made "preliminary grants" of $1,000,000. And yet, if these schools are not to depend upon Federal subsidy and be under bureaucratic control, they cannot depend upon the ebb and flow of contributions by the public, but must have assurance of dependable year-to-year income. That is the objective of the Committee of American industry for this national fund, whose chairman, Colby M. Chester, has mailed appeals to 17,000 corporations, seeking to enlist their support.

Says Mr. Chester: "Government intervention into this traditionally private field could spell the kiss of death for academic freedom and would most assuredly add to the alarming degree of Socialism that is ours in America today."

S. Sloan Colt, president of the fund, insisted that without enough competent doctors—we need more now than ever before—the gains of medical research in recent years "will be minimized if not entirely nullified."

Back of this movement can clearly be seen the fear that Federal subsidy to medical education would be the entering wedge for socialized medicine like that in Great Britain.—Athens Banner-Herald.

Recent Advances in

PHYSICAL THERAPY

Applied to

GENERAL PRACTICE

ARTHUR M. PRUCE, M.D., Atlanta



Fig. 1. The moist heat pack unit (Hydrocollator).

Recent advances in physical therapy afford a solution to the problem of offering patients adequate office treatment at a reasonable cost during this period of inflated values. After June 30, 1952, a ruling by the Federal Communications Commission will be effective, making hundreds of thousands of dollars of medical diathery equipment obsolete. This ruling leaves many of us with the problem of replacing the shortwave diathermy or providing an adequate substitute. Fortunately, physical therapy equipment, tested and approved in recent years, provides a selection of inexpensive modalities which will cover the therapeutic needs of our patients.

Read before the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 13, 1952.

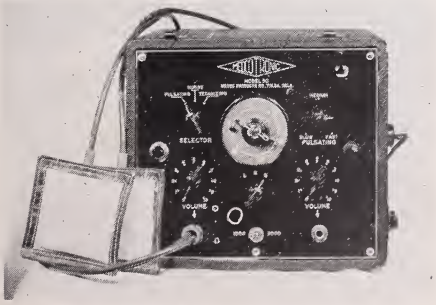


Fig. 2. Portable galvanic unit (Medcotronic).

The local application of heat is the most common physical therapy in medical practice. The physiological response to heat is vasodilation and hyperemia, but response to heat from different sources will vary from patient to patient. Common modalities found in offices include radiant heat bulb and infrared core lamps, the baker and short-wave diathermy, but I consider the moist heat pack the basic unit with the widest application for both office practice and home use of physical therapy. A simple, inexpensive and effective heating unit (Fig. 1), the moist heat pack can be used in the office, and by the patient at home. No longer do I consider the diathermy the basic heat unit for general practice although for many years the standard office procedure has been the application of diathermy for thirty minutes three times a week. FCC accepted diathermy units are now available in both short wave and microwave types. Both are convenient but relatively ejpensive forms of securing a transitory rise in local tissue temperature.

The efficient and inexpensive moist heat unit, consists of a small, stainless steel tank equipped with a thermostatic control, that maintains the steam packs at a constant temperature of 170 F. The pack is made of a fabric envelope containing a silica gel which absorbs and holds a large amount of water. When immersed and heated in hot water, it becomes a hot compress which provides thirty minutes of intense moist heat. The intensity of the heat may be controlled by increasing or decreasing layers of towelling between skin and compress.

The moist heat pack is particularly effective in muscle spasm associated with acute lumbo-sacral sprains. The painful lumbo-sacral segment is protected against motion by lumbar muscle spasm. Office diathermy releases spasm leaving the part unprotected. Recurrence of spasm is frequently evident by the time the patient reaches his home. A more reasonable procedure would be to institute heat treatment at home. Bed rest with frequent applications of the pack will gradually restore the muscles in spasm to normal length.

Acute tendonitis or acute bursitis of the shoulder is another situation in which not only is diathermy contraindicated, but all forms of heat as well, until such measures have been instituted which will reduce the inflammatory process. This can be accomplished best by the use of ice packs. As soon as the inflammation has subsided, the moist heat pack aids in overcoming the spasm in the muscles of the involved shoulder girdle.

Another situation in which the moist heat pack has proved effective is the painful knee. Here the pain and muscle spasm must be alleviated before therapy such as massage and/or exercise can be instituted.

Moist heat packs, because of their flexibility and ease of placement can be used to treat several affected areas simultaneously. In generalized arthritis involving multiple joints, the advantage of being able to treat a number of joint segments at the same time is obvious. In contrast, diathermy would permit, at the most, treatment of two adjacent or symmetrical joint segments, and the treatment would be strictly an office procedure. *Although* infra-red and radiant heat lamps and heat cradles may be used for these situations, I consider the moist heat pack superior. If heat therapy is indicated, it should be used frequently and intensively so that a continuity of therapeutic effect is assured.

There are specialized situations for which the moist heat pack, despite its adaptability, falls short in its effectiveness.

The paraffin bath is the treatment of choice for chronic arthritic hands and feet, and it is essentially a home procedure. By melting eight pounds of paraffin or jelly wax in an improvised double boiler consisting of a wide mouthed bucket, immersed and heated in a large pan, and then repeatedly dipping the part, a thick, hot paraffin glove or paraffin boot develops.

After twenty minutes the paraffin is removed, massaged free and reused.

Whatever the heat source, once the pain and spasm have been overcome, the heat should be supplemented by massage and/or exercise.

The competition of federal agencies for technical personnel by offering incentives that private practitioners and private hospitals cannot meet, has made qualified physical therapists rarely available. Massage applied by such trained technicians has a sedative and relaxing effect and serves as an ideal preparation for therapeutic exercise. Recently a portable electrical muscle stimulator (Medcolator) has been accepted by the Council of Physical Medicine and Rehabilitation of the AMA that can reproduce certain effects of manual massage and passive exercise (Fig. 2). This device will enable the general practitioner to administer such therapy at the bedside, or in the office with routine office help. I have found this unit useful in stimulating atrophic muscles at joints that have been damaged by trauma or arthritis. It is also useful in eliciting painless contractions in flaccid paralysis. In addition, the sedative effect of the tetanizing current has proved of psychological value in neuromuscular tension.

While this unit has specific properties, the value of manual massage and exercise remains undiminished.

Stiff shoulders and weak knees are two situations in which exercise is frequently prescribed. The common practice in management of stiff shoulders is to prescribe the exercise known as finger climbing up the wall. Most stiff shoulders are limited in external rotation and abduction. Since it is anatomically impossible to elevate the arm overhead without rotary motion, it is evident that finger wall climbing can be effective only after regaining external rotation. Until external rotation is re-established, finger wall climbing is worthless. The basic exercise in the attempt to re-establish external rotation may be described as follows: the patient is seated at a table, elbow supported at maximum forward flexion of the shoulder, and with a weight in the hand, the patient is instructed to carry out a pendulum motion of the forearm laterally, across the chest (Fig. 3).

Fig. 3. Exercise for external rotation of shoulder joint.





Fig. 4. The De Lorme boot for resistive exercise, quadriceps.

The elderly patient with a unilateral, painful, weak knee may show equally severe degenerative joint changes in both knees. However, a measurable atrophy of the quadriceps muscle is demonstrable only in the painful knee. An obvious deficiency in quadriceps strength is the inability to keep the knee extended against manual resistance. Heat alone applied to such a knee may give transitory relief from pain ,but the results will be disappointing unless exercises are instituted for the strengthening of the atrophied quadriceps.

Initially, simple quadriceps drill should be instituted. With the knee extended, the knee cap is pulled up ,repeated on the hour every hour until the patient is able to lift the leg from the floor, and take increased manual resistance. At this point he is ready for the first of the progressive resistance exercises. This is the extenion of the leg on the knee. Finally, the De Lorme boot (Fig. 4), with graduated weights may be applied. In place of the boot, any device which would provide graduated weights is useful.

Physical therapy is only one aspect of the large field of rehabilitation. With increased life expectancy, the number of victims of cerebrovascular accidents are seen with increasing frequency. Of those patients that survive the first episode, approximately fifty per cent become ambulant, but ninety per cent could become ambulant if appropriate rehabilitation measures were instituted early. The frozen shoulder and shortened heel cord seen repeatedly among these patients could be prevented in a large number of cases by proper positioning. Contractures may occur within the short space of ten days that can become permanent and irremediable. Proper positioning of shoulder, leg and foot, simple passive movements of the involved joint segments, early ambulation and application of leg braces where required, would restore many of these patients to a useful life.

PRESS COMMENT:

Doctors Diagnosed

An interesting and thought-provoking meeting was held in Richmond, Virginia, the other day by the Academy of Medicine of that city, to which members of the local press were invited.

The doctors were courageous enough to lay themselves open to all sorts of possibilities and potentialities by asking the news men for a diagnosis of what ails the medical profession. The news writers were far from timid, and they plied the physicians and surgons with a number of exceedingly pertinent questions.

The scribes, for example, wanted to know why doctors persist in not telling their patients exactly what is wrong with them—even when they know it. They asked the users of the stethoscope and scalpel why they were unwilling to answer night calls. They charged that doctors keep their patients waiting too long—after giving them appointments at specific hours—and wanted to know why.

The newsmen finally questioned the practitioners on the expressed premise that the medical fraternity is too prone to specialize in regard to man's ailments and anatomy and they wanted to know, above all, why the gentlemen, who are presumed to heal and save lives, are so often guilty of "scientific aloofness."

The answers to these and sundry other questions have not as yet been made public, but Dr. Edward Haddock, chairman of the Academy's public relations committee, says this will be done soon.

It is reported that the session began in a casual, off-hand way, but that it quickly evolved into a session marked by a flank as well as a frontal attack on the physicians and surgeons, with the biggest batteries of interrogation drawn up by the newsmen's battalion.

We must say that our first impulse is to voice an intense admiration for the hardihood and the bravery of the doctors. They asked for it, and they got the questions, and they say they have the answers!

It is safe to suggest that only Richmond's many sufferers of the ailments and afflictions to that burden man will be interested to hear what they have to say for themselves, but that clients of the medical profession in other communities will be intrigued as well.

—Savannah Morning News.

Special Articles

ENOCH CALLAWAY, M.D., LaGrange

The Relationship Between LACERATIONS of the Cervix and CARCINOMA of the CERVIX

For years textbooks and articles dealing with carcinoma of the cervix have ascribed a causative relationship between lacerations and this disease. This causative relationship has been based entirely on the fact that a large majority of women who have carcinoma of the cervix have borne children. The percentage varies in different series from as low as 80 per cent up to as high as 92 per cent. This, of course, might suggest that there was some relationship between the two conditions. However, this conclusion cannot be valid unless there is some knowledge concerning the percentage of women who have had children. In a study made in Troup County, the percentage of women who had had children coincided almost exactly with the percentage of cases of carcinoma of the cervix found in child-bearing women. This not only held true when both white and colored women were considered together, but also when the two racial groups were separated.

If any clinician will carefully consider the early stage carcinomas of the cervix that he has seen, he will be impressed with the fact that these lesions do not occur in the scars of lacerations, but are more prone to occur on the portio of the cervix or in the endocervix away from these scars. In more advanced carcinomas, it is of course impossible to determine at what point their origin took place. It is of course true that the inflammatory pathology which may take place as a result of lacerations does at times produce a very confusing picture and may make it very difficult to determine the exact site at which a biopsy should be taken. There are many reasons why lacerated cervices should be treated and conceivably in extremely rare instances, even subjected to surgery. Repairs of the cervix, conizations, and even well performed amputations do not remove all of the tissue which may be the site of cervical carcinoma. It is certainly unfair to tell a patient that this work is being done as a cancer prevention measure, and it is both untrue and extremely dangerous to tell a patient that by having this surgery performed, she has removed the danger of carcinoma of the cervix.

The persistence on the part of some gynecologists in disseminating the erroneous information that lacerations cause carcinoma of the cervix has two very bad results. First, it tends to make the general practitioner feel that there is no need for him to suspect carcinoma of the cervix in a nulliparous woman. Second, it encourages surgeons to do incomplete hysterectomies on non-child-bearing women, thereby leaving a residual piece of uterus which, for some reason that is not known at the present time, becomes ten to twenty times as susceptible to the development of carcinoma as the cervix in women who have not had a partial hysterectomy.

A simple complete hysterectomy carries no more risk to the patient when done in a competent manner than does a partial hysterectomy. If the operator is not competent to do a complete hysterectomy, he is not competent to enter into any type of elective pelvic surgery. When part of a uterus is removed, the residual portion becomes not only useless, but extremely dangerous.

Except in rare conditions where an operation must be completed rapidly to preserve life, I can see no more excuse for leaving part of a uterus than I can see for leaving part of an appendix.

T. F. SELLERS, M.D., Atlanta

WORLD HEALTH ASSEMBLY

Delegations from more than sixty nations and dominions convened at the Fifth World Health Assembly in Geneva, Switzerland, in May, 1952.

The World Health Assembly is the governing body of the World Health Organization, which is an integral part of the United Nations Organization. When the International Conference met in San Francisco in 1945, a proposal was made by representations of several nations that there be established an international agency to promote and improve health conditions throughout the world. It was felt that regardless of political, racial, geographic and socio-economic differences, health was an essential factor common to all nations, and that the sooner this common denominator could be recognized, the better the prospects of world peace.

An Interim Commisison was appointed to draw up the WHO constitution. Embodied in this constitution are the following principles:

1. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.
2. The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and states.
3. The achievement of any state in the promotion and protection of health is of value to all.
4. Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.
5. Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

Membership in WHO

The original eligibility to membership in WHO included all fifty-one nations as members of the United Nations, as well as any or all of the fourteen non-members that would accept the Constitution prior to the first World Health Assembly.

However, WHO could not become an official international agency until twenty-six United Nations members ratified it. Oddly enough, Communist China was the first to sign, and Russia was one of the first twenty-six, but the United States, because of Congressional opposition, was one of the last to sign.

The First World Health Assembly

The First World Health Assembly met June, 1948, in Geneva, and adopted a budget, with a formula of apportionment based on the population and economic status of its members. The United States' share was 38 per cent. This first assembly was marred somewhat by the petty contentions of the Russian delegates and their satellites. Before the Second World Health Assembly met in Rome in 1949, Russia and all of its satellites "resigned," but their resignations were not accepted, and in all subsequent meetings the Iron Curtain countries have been conspicuous by their absence and have been listed as "non-active members."

Geneva, the Home of WHO

The permanent home of WHO is the Palais des Nations in Geneva, built in 1936 by the now defunct League of Nations.

WHO Secretariat

The affairs of WHO are handled by a Secretariat of which Doctor Brock Chisholm, of Canada, is the Director General.

The functions of the Secretariat are:

1. To plan for the annual Assembly meetings and to carry out its directives and policies. Since the Secretariat must deal individually and collectively with over sixty nations, a large staff of highly trained professional and administrative personnel is required.
2. To provide facilities and materials for numerous interim meetings of the 19 member Executive Board, of Expert Committees and of technical discussions.
3. To provide liaison relationship with other pertinent agencies of the United Nations and related international agencies.

Accomplishments of WHO

In spite of widely varying political, historical and economic factors and language barriers, and considering its tender age of only five years, WHO is achieving to a remarkable degree its objective as a responsible international agency in the field of health. With each succeeding assembly it grows stronger in its acceptance and recognition as an instrument of world peace. Here are some of its accomplishments:

1. The WHO Expert Committee on Standardization of Biologic Products has obtained international acceptance of standards of quality, dosage and nomenclature of certain antibiotics and vitamins, as well as various therapeutic and prophylactic agents, such as diphtheria and tetanus toxoids, BCG, bacterial vaccines, etc.
2. The International Pharmacopoeia is being revised by a WHO Expert Committee with reference to uniformity of dosage, labeling and terminology.
3. Another Expert Committee on Drugs Liable to Produce Addiction is making great progress in its objective of bringing about world wide control of traffic in narcotics and habit-forming drugs.

4. At the Fifth World Health Assembly, the new code of International Sanitary Regulations was adopted without reservations by all nations except those behind the Iron Curtain. This code has to do primarily with reciprocal quarantine agreements relative to epidemic diseases and protection against their transmission from nation to nation.
5. Financing and carrying out of training and demonstration projects in those countries desiring assistance in controlling such diseases as malaria, tuberculosis, venereal diseases, malnutrition, etc. Demonstrations in the field of nutrition, maternal and child health and environmental sanitation are provided by WHO upon request. In such work WHO cooperates financially and functionally with other international agencies, such as United Nations Technical Assistance program for Economic Development and the United Nations International Children's Emergency Fund. (UNICEF)
6. Fellowships are provided especially to the underdeveloped nations so as to train local personnel in the techniques of disease control.
7. A variety of routine services to all nations in health education, global data on disease incidence, results of medical and biologic research, etc.
8. By no means least in importance is the setting up of technical discussions whereby all interested members of the Assembly can sit around the table in small groups and discuss informally with each other the common problems with free exchange of ideas. Language difficulties? Yes, but WHO provides even for these small group discussions a remarkably efficient system of interpretation.

Transcending all of these specific achievements is the opportunity afforded each year to men of leadership among all nations to meet together professionally and socially and to form personal friendships with each other. This is bound in the end to contribute to better mutual understanding and to international good will.

Personal Observations of a Neophyte

I had the good fortune to be a delegate to the World Health Assembly in May of this year. The American delegation was the largest in number. Doctor Leonard A. Scheele, Surgeon General of the United States Public Health Service, was the chief delegate, as well as being the retiring President of the assembly. In his party were representatives of the United States Public Health Service, Department of State, Children's Bureau, Schools of Sanitary Engineering and Public Health. Doctor L. W. Larson represented the American Medical Association. Mrs. Fannie Hurst Danielson, the author, represented the American people. I represented local health organizations.

Other agencies represented were the Smithsonian Institute and the U. S. Parmacopoeia. But despite its large delegation and the fact that the United States was acknowledged to be the most powerful and advanced nation, we had only one official vote, as did even the smallest state—Monaca. Many countries sent only one delegate.

It was indeed an inspiring spectacle to witness the opening session. Each of the sixty or more nations had its block of seats, labeled in alphabetical order. In the walls on each side were glassed-in cubicles for the interpreters. Through earphones each person in the hall could hear the speaker in English, French or Spanish, as he preferred. The interpreters were very skillful, not only translating spontaneously, but adding emphasis, stress and even gesticulation as needed. Strict formality was observed, not only in the plenary sessions but also in the various committee meetings. Regardless of numbers represented, each delegation had only one vote. Oratory and finesse of expression were no respectors of race, color or national standing. The most impressive speakers were the Indians, who always spoke in English. The most vocal and contentious were the small nations. The most effective but infrequent speakers were the Americans. Believe it or not, the wittiest were the English and Irish, who frequently converted tense moments into laughter.

Two whole days were spent in futile debate on the subject of over-population problems. The near-East countries, having high birth rates and empty cupboards, wanted WHO to sponsor birth control, and their arguments were very eloquent. But resistance from the large block of Catholic countries was strong. As the tension mounted, the unity of the Assembly seemed to be seriously threatened. One of the American delegates skilled in linguistics and diplomacy saved the day by persuading the proponents to withdraw all proposals in the interest of harmony.

It was my observation that the United States was respected for their economic power and skills, but resented by some and feared by others. Since many were our debtors, hence beholden to us, it is only human that they should resent us. Knowing this, we were instructed to hold our tongues and to be very discreet.

Most of the large nation delegations entertained the Assembly each with a cocktail party. Of these there were no less than twenty-five, all very much alike. At these parties the delegates really became personally acquainted, sometimes too much so. The Swiss Delegation were hosts to an all-day excursion into the Alps, where a wonderful picnic dinner was served by Swiss maidens in costume. On this event I could elaborate at length.

In conclusion, here is something to think about. The United States is recognized throughout the world as the most advanced of all nations in public health and medical science. The retardation of other nations is not due to inferior intelligence, but rather to economic barriers. Doctor Brock Chisholm has aptly phrased the problem: "Poverty and disease have long formed a vicious cycle: Men and women are sick because they are poor—they become poorer because they are sick, and sicker again because they are poorer."

We stand ready and in fact are committed to share our material advantages with the rest of the world. Our returns for this investment will not be measured so much in gratitude and good will as in elevating the economic position of our sister nations in order that they will be physically and economically healthy and thus better able to resist the inroads of Communism in its worst form.

Note: Dr. Sellers attended this Assembly as one of 3 physicians selected to represent the United States. This honor is worthy of note.—Editor.

JOSEPH D. McELROY, M.D., Atlanta

Some Observations on

SOCIALIZED MEDICINE

in

ENGLAND

During a recent brief visit to England, I had the opportunity of listening to a number of people express their thoughts on the matter of socialized medicine and discussed the situation with several prominent London physicians.

My first contact with the subject occurred at the Amsterdam Airport while awaiting a delayed departure for London. Two Englishmen engaged me in conversation discussing the severely limited travel restrictions placed upon the English people and it was only a small jump to a discourse upon the inconvenience imposed upon the people by the "Health Scheme." They did not know that I was a physician and that therefore their discussion was much more frank that it otherwise would have been. Each of them in turn related a number of experiences in which they had been forced to sit in a crowded doctor's waiting room for as much as eight hours for the privilege of spending less than one minute in the presence of the physician. Each was very bitter in describing repeated experiences in which they had been able to enumerate only a few of their major complaints before having a prescription shoved at them without benefit of any form of physical examination. It seems that people the world over are alike in the sense that they demand the ability to feel that the problem of their own health should be the foremost concern of their physician. Each criticized many other people for taking up the doctor's time with trivial complaints, thus depriving people with more serious ailments of the opportunity to spend more time with the doctor.

These men demonstrated another international misconception in their beliefs that all doctors are rolling in wealth. They demonstrated a total disregard for the fact that the English physician, like the rest of us, must put in many more hours per week than the average laborer, that thanks to the low "capitation tax" paid for each member of the doctor's "panel," his gross income is not sufficient to maintain him and his family on his previous standard of living and that his expenses must, in a large measure, come from his own pocket. Their whole attitude toward medicine points to one of the greatest dangers in socialism in the sense that once a person has received something for nothing his standard of values is permanently distorted. He demands more and more in return for less and less of his own efforts.

A prominent London psychiatrist may be used as an example of the profession's attitude toward the "scheme." In the past, he had travelled widely and had a great desire to return to the United States, but he freely admits that on his limited income and with the present travel restrictions a return visit would be impossible unless he were invited on some basis which would provide payment of practically all of his expeness. Travel restrictions were tightened recently so that an Englishman travelling abroad can take only twenty-five pounds, which at the current rate of exchange is $70.00. High taxes further cut into his standard of living. It is necessary for his wife to work full time in order that they may enjoy what can best be described as moderate circumstances Like many other specialists, he augments his income by taking private patients, but it seems that the supply is constantly dwindling. Both this man and a friend who is director of another psychiatric division freely admit that they have sensed in themselves a diminished incentive to work and they are properly concerned about this tendency. An interesting commentary was the expression of envy of the dentists who command proportionately higher fees and can dictate their own schedule.

While I was in London it was announced that a charge of one shilling (14 cents), would be made for each prescription issued by a physician, and that there would be a drastic reduction in services of such a nature as wigs and various forms of treatment primarily designed for cosmetic effect. The aforementioned psychiatrist felt that this additional charge was a step in the right direction but could foresee no drastic revision in the present health scheme. It is to be noted that the one shilling

charge is to be turned over to the Government requiring one additional step in the already tremendously complicated system of keeping of books and records necessary in a bureaucratic enterprise.

Without exception the London physicians with whom I talked expressed envy of our ability to engage in the practice of medicine as a free enterprise and spoke of the fact that the free enterprise system permits us to practice a better grade of medicine.

I spent a Sunday afternoon in Hyde Park, London, where there gathers each Sunday afternoon a crowd of several thousand people to hear one or more of some twenty soap-box orators discoursing upon every conceivable subject. It did not seem strange that several of the speakers made reference to the Health Scheme. A representative of the Socialist Party screamed to the effect that the present Government had betrayed the trust of the people in imposing the one shilling per prescription tax and was loudly demanding, not decrease, but increase in the benefits from the cradle to the grave scheme. The Conservative Party representative, just as loudly, defended the new tax and promised very vague but widened benefits. The Communist speaker, as is to be expected, was assailing each of the other political parties and propounded the belief that under the Communist Party no such crisis would have arisen. Another Communist speaker was kept so busy parrying the heckling crowd following a remark to the effect that Adolph Hitler had been a fine man that he did not have time to get around to the topic of socialized medicine. Still another speaker, whose political aspirations were not determined, humorously and satirically belittled the physician and the hospital which undoubtedly had saved his life when a few weeks previously he had been taken into the hospital after being found unconscious in the street suffering from pneumonia. I wasn't able to determine just what he was driving at, but it was obvious from his ability to bellow at the top of his lungs about his demand for the privilege of free speech, that the physician and the hospital must have done a pretty fair job on him. Again, this seemed to be to me an example of the fact that under socialism the peoples are incapable of feeling gratitude, but rather feel that the Heavens should open wider so that more manna may be deposited.

The hospitals that I visited seemed to be adequately staffed which may be due to the fact that many physicians feel that they are better off to work for the same or perhaps very slightly less money, than to be engaged in the thankless situation of private practice in England today. I feel that even brief contact with socialized medicine would convince most of the doubters that ours is the best system of medicine in the world today, and a system which we most vigorously must protect.

490 Peachtree Street, N.E.

WILLIAM L. WILSON, M.D.,
Washington, D. C.

The CHALLENGE *of* CIVIL DEFENSE HEALTH *Services--The National Picture*

Colonel William L. Wilson, Medical Corps, United States Army, Assistant Administrator for Health and Welfare, Federal Civil Defense Administration, Washington 25, D. C.; read before the 102nd Annual Session of the Medical Association of Georgia, Atlanta, May 13,. 1952.

*Assistant Administrator for Health and Welfare, Federal Civil Defense Administration, Washington 25, D. C.

When I was asked to present the national picture of the challenge of civil defense health services, I immediately thought of the feelings men must have had in the past as they faced the national picture of their own times. I am sure that every generation feels that theirs is the most

difficult, the most complex, the most hazardous existence men ever faced, and probably each generation has been correct. One has only to quote that "these are the times that try men's souls," to feel that today, as was true in Thomas Paine's day, is a time in which there was never so great a challenge to men. If all of this is true, what can we in health and medical activities offer, not only to the people but also to our professional colleagues? The answer, in my opinion, exists in an old Arabian proverb that "He who has health, has hope, and he who has hope, has everything."

It is not enough to come together today to quote proverbs. Rather should we agree, if possible, upon the exact point where man's hope might focus. It seems to me that, without too much difficulty, we could agree that man's hope throughout time has focused upon the family. The family is the focal point for the future of the race. Throughout the development of the medical and health sciences and arts, the focal point of practice in the realms of physical and mental health has always been the family. The survival of our heritage, our very way of life, our faiths, our freedom—all concentrate upon the family as the bulwark. So it is quite natural then that civil defense might be considered synonymous with protection or restoration of the famliy. If we can accept that, civil defense means no more complex a problem than assuring the survival of the family. Now in order to assure that survival, we must protect or restore the home or where necessary, provide a new home. Therefore, the civil defense health service challenge, from the national viewpoint, may be considered to be a challenge to the American home.

Another great challenge exists and it could have serious effects upon the family and the home. This is a more intangible challenge than we find in contemplating the atomic or other tangible weapon attacks. This is the problem field of continuing and increasing stresses upon people. I believe we could all agree that our people have been quite strong up to now in the face of continuing stresses. One need recall only the Berlin blockade, or many incidents of variable importance since the Berlin blockade, leading up to the Korean incident.

Since military action, begun in Korea in 1950, there has been more of a tendency to try to visualize just where new problems in our national picture might appear next. In visualizing such a picture and such potential problems, our people must be ever stronger. To do that they must at least have the picture. What can we do in helping to formulate that picture?

The professions concerning themselves with medical and health activities must provide the leadership in painting a true, practical, and reasonably complete picture for the public. We might well be proud to be one of the professions which long ago accepted the challenge. The American Medical Association did accept the challenge to the health of the people when it established the Council on National Emergency Medical Service five years ago. During the five years that have ensued, others have joined. Today, not only the medical profession, but all of the health and related professions and groups all over the country, lead all other groups in accepting the challenge. And that is as it should be. We have now for consideration, however, an even more important question to answer. How do we go on as professional people in presenting a proper picture?

A picture is a visual image, and in order to have that image one must look for it. Therefore we can guide the people in looking for the picture. Since a national picture is so changeable, and can change so suddenly, one must look frequently for the picture. Three years ago in the Academy of Medicine here in Atlanta, I pointed out that the national picture is a kaleidoscopic thing, and there was presented a program with a view to aiding the profession in formulating a picture for itself, as it existed at that time. That picture no longer applies, except in basic principles. It has changed markedly, and it changes by the minute.

In order to have a proper picture, one must not only look for it and look at it frequently for the changes, but one must look ahead and see the picture of things to be. Of all the people in the world who should be most capable of doing this, the medical profession should have had the most experience. It is for the profession then to look ahead. Let us be sure that we do look ahead. We might again quote: "For I looked into the future far as human eye can see." If the profession does not do just that, we are likely to have grave results.

Up to now then, as I have previously indicated, the profession, the people, and the government have accepted the challenge of civil defense health service. That is why we have as good a national picture as we have at this time. How has that national picture developed?

In January 1951, a Federal Civil Defense Administration came into being by act of Congress. From that has resulted a national headquarters and nine regional offices covering all the states and all the territories of this Nation. We have proceeded with the staffing of these offices by capable representatives in the various fields of civil defense in which we must make preparations, long before we would be able to provide civil defense operations. All of the states now have directors or coordinators of civil defense. The governors and the state directors have had designated for them the likely critical target areas, those most vulnerable to enemy attacks. These have been established only after consultation with the Department of Defense. Not only has there come into being a national headquarters, nine regional offices, and state offices of civil defense, but many of our communities have progressed more than many may realize.

It would not be reasonable for the communities or the states to prepare for civil defense independently. There has resulted one agency, the Federal Civil Defense Administration, which is charged with national plans and programs. The Federal Civil Defense Administration is charged by law with spon-

soiing, directing, coordinating, and guiding the states in their preparations for civil defense, and in assuring the means and measures whereby material assistance could be brought to the states in the event one or more of them should be attacked by a ruthless enemy. Fifteen months after the establishment of the Federal Civil Defense Administration, the President has issued Executive Order 10346, which established an orderly system by which the Federal Civil Defense Administration could coordinate the active participation by all Federal governmental agencies in civil defense activities.

To return to the subject of health matters, the Federal Civil Defense Administration has had a published initial health and welfare program since March 30, 1951, which can be implemented under General Orders issued by the Administrator, Federal Civil Defense Administration, April 2, 1951. In that program, specific target dates were set. We designed for ourselves exact missions. Perhaps it would be interesting to list those missions for you, although time prohibits detailed discussion.

Our first mission, with target dates established, applied to organizing and prescribing the functions related to health and welfare matters in the national headquarters and the regional offices. Our second mission was defined as staffing these offices.

Next, it was hoped that we would be able to define objectives in some detail and establish the priorities for achieving those objectives in national, regional, state, community, voluntary organization, and professional fields.

While all of these first three missions were being undertaken, of necessity there had to be undertaken the provision of means for material assistance to the states. We have undertaken this in the form of providing Federal stockpiles of medical and other supplies, for providing organizational equipment to be used by aid stations in any of the target areas, by providing for reasonable standards to be applied to individual equipment, and to provide for the equipment and supplies related to or required by mobile support groups.

Our fifth mission was to publish to all concerned appropriate programs, procedures and functions, while the sixth involved not only the provision of technical information required for civil defense, but also advice and guidance as to training programs, training objectives, and training techniques. Other objectives have been the establishment of standards of performance, the establishment of uniform and adequate reporting systems, and finally, the designing and mutual establishment of acceptable control systems.

To implement all of the foregoing has required national guidance and coordination. Such guidance and coordination within the civil defense organization has been provided by the Health and Special Weapons Defense Division and the Emergency Welfare Service Division of the Health and Welfare Office. There are other Federal government agencies, however, with which these two Divisions have found it necessary to develop mutually acceptable programs so that the regional offices of the other agencies could be instructed and guided appropriately by the agency concerned. This is likely to continue to be done through the regional offices of the various government agencies. There have been all sorts of problems of national guidance and leadership associated with our work with national professional groups. To mention only a few of the groups, these are the American Medical Association, American Dental Association, American Veterinary Medical Association, American Public Health Association, American Hospital Association, American Pharmaceutical Association, Association of State and Territorial Health Officers, American Psychiatric Association, American Public Welfare Association, American National Red Cross, and many others.

Typical of the acceptance of the challenge have been such responses as the Medical Civil Defense Conference convened in Chicago, Nov. 9-10, 1951, under the joint sponsorship of the American Hospital Association-American Medical Association-Association of State and Territorial Health Officers. I am sure all of you have heard of that conference.

Another example was a Symposium on Biological Warfare conducted by a panel of experts before several hundreds attending the Annual Meeting of the American Public Health Association in San Francisco on Oct. 30, 1951.

There have been programs of a continuing nature as well. One of these is that undertaken by the Medical Correctional Association of the American Prison Association, designed to offer opportunity to many thousands of Federal and State prisoners to participate in civil defense activities on a voluntary basis. Still another is the civil defense program of the General Conference of Seventh-Day Adventists. Not only is this church membership undertaking to obtain standard Red Cross first aid training for all its membership, but the various churches and other installations are volunteering their facilities, services, and support to local and state civil defense directors.

The challenge has been accepted in an active way by the American National Red Cross. In addition to accepting responsibility for collecting blood for the National Blood Program of the Federal Civil Defense Administration and the Department of Defense, the Red Cross issued more than a million first aid training certificates during the first nine months of 1951, and as of September 1951, was averaging 200,000 new certificates per month. These are cited to you as only a few of the typical acceptances of the challenge.

It would not be a complete national picture were I not to report to you in the broadest way the fact that some $80,000,000 worth of medical supplies are in actual process of procurement for application to civil defense medical operations in the event of attack. In addition, you should know that the President's budget for fiscal year 1953 includes $146,000,000 more for the procurement of essential medical supplies. These would assure material means for preventing even more suffering and for the prolonging of life or restoring to health of countless more casualties than we are now ready or able to guar-

antee. There is not time to report the details of this matter to you.

I think it is worth considering what the acceptance of the challenge has meant. Seventy per cent of all the Federal appropriations to the Federal Civil Defense Administration to date have been for health and welfare purposes. Eighty-nine per cent of all the funds for Federal stockpiles of civil defense supplies appropriated for the fiscal year 1952 was for medical supplies. Ninety-four per cent of all funds for Federal stockpiles of civil defense supplies in the President's budget for the fiscal year 1953 would be for health and welfare supplies. Three-fourths of all the warehousing capacity required for civil defense purposes would be for health and welfare supplies.

Yes, the challenge of civil defense health services in the national picture has been accepted. We have shown from what we have said that it has been accepted, but why is it likely that this is true?

Assuring health and welfare by reasonable preparation for civil defense will waste nothing of value which your community can use fully in peace; assuring peace will waste nothing of value which may be made ready for reasonable community health and welfare in civil defense.

There are several major problems which are of concern to us now. They are problems of the types and quantities of supplies required for civil defense. They are problems which would be presented if mass evacuation of the civil population from one or more of our cities became necessary. They are problems which would result from mass movements, panic states, or from effective psychological warfare against our civilian population, unless we could counteract this with unusually successful and well designed mental health programs. They are problems which would present themselves in the face of need for organized support by the states and communities . In this latter, we find the true future of civil defense, for no state and no community would could possibly undertake civil defense activities sufficient to bring a state or community through an effective enemy attack without aid from others. The mobile support may be in the form of sending aid as teams, supplies, or transportation means to other communities. The mobile support could consist of moving the victims of attack into a community which has not been attacked and which could receive and care for the victims of an attack from another city.

In all of this you have a major part to play. We can provide the national guidance, and we shall do it. The states can function properly, and they will. But you have your part.

The ultimate objective of civil defense is good physical and mental health of the whole population. All of the material things that we have available should be considered to be available for that purpose. The national survival will depend upon the preservation of life, of health, and of effective production.

It is your privilege to assure the existence and acceptability of all of these programs that I have mentioned to you. Until you do this there can be no safety for our homes, there can be no future for our families, there can be no public confidence in our leadership, and there can be no individual, family or community freedom from hazards which we must assure if we are to visualize success. It is for you to participate actively in the development of the family, community, state, and national programs. You can start that during this meeting, if you have not already done so as many have, but that will not be enough . . . you must continue next week, next month, next year. You must provide the leadership to all of the people in living civil defense.

It is you who, throughout the years, have had more to do with influencing, or with influence upon, the family and the home than any other single group of people. I could do no better, then, than to close by quoting John Ruskin:

"This is the true nature of home—it is the place of Peace; the shelter, not only from all injury, but from all terror, death, and division."

PRESS COMMENT: *Setback of Socialism*

Years ago, the Oregon State Medical Society set up a prepaid hospitalization program, which Oregon people could join at a modest monthly cost if they wished to. In 1949, the government brought an anti-trust suit against the plan's sponsors, in which the main claim was that participating doctors conspired to eliminate prepared medical care plans not sponsored by themselves.

After a five-months trial, resulting in an 8,000 page court record, a Federal judge threw out the suit in toto. He held that the Oregon doctors had established their plan to "save their profession from socialism," and that no court should require organized medicine to "remain a sitting duck while socialism overwhelms it."

This didn't satisfy the government, however. At a heavy cost to both the taxpayers and the defendants, the case was taken to higher courts. It finally ended last April, when the United States Supreme Court, with but a single dissent, upheld the trial court and tossed out the monopoly charges.

So socialized medicine has taken one more setback —and the cause of free, voluntary action by a free people has taken a step forward.

MANCHESTER MERCURY.

An Invitation

to the

GENERAL HOSPITALS

in Georgia to Form a

SECTION *of*

GENERAL PRACTICE

PETER HYDRICK, M.D., College Park

The primary purpose of this paper is to urge all hospitals to take the step of integrtaing the general practitioners into the medical staff organization and activities. As a secondary objective it is hoped that the general practitioners will come to realize that the hospitals are doing all possible in their behalf and that the existing difficulties are basically not the fault of our hospitals but are the indirect result of the prevailing policies in medical education and practice with their ever increasing trend towards specialization. Whether right or wrong, these policies and trends are not determined by hospitals but arise from within and can only be corrected by the medical profession itself. As a result of over-specialization and because of the general practitioner's failure to take an active part in organizational affairs, he has become an inarticulate minority in the planning of medical policies and he finds himself now in too many instances on the outside of the otherwise well integrated and coordinated staff systems of our hospitals. Some hospitals have provided a place through establishment of a general practitioners section as outlined by the manual on the same established by the American Academy of General Practice. This plan is endorsed by the American Medical Association, the Advisory Board for Medical Specialties and the American College of Surgeons. There is no reason why we cannot follow the example set by these progressive institutions.

The public has in recent years become conscious of needing well trained doctors who can take complete charge of the medical requirements of the family. In time of illness or injury, most people want a family physician to care for them who will call for specialized assistance when he feels it is indicated. Specialization is here to stay. We all heartily concur in this, and none of us would have it otherwise. But 80 to 90 per cent of medical cases are delivered through the means of general practice, so, general practice is *also* here to stay. We need to strive for a balanced medical community. To properly fill the role of family doctor, the general practitioner must have access to hospitals and to all the specialized equipment and assistance available in these modern institutions.

What is a general practitioner? By definition set up by the American Academy of General Practice—quote "A general practitioner is a legally qualified doctor of medicine who does not limit his practice to a particular field of medicine or surgery. In his general capacity as family physician and medical adviser he may, however, devote particular attention to one or more special fields, recognizing at the same time the need for consulting with qualified specialist when the medical situation exceeds the capacities of his own training or experience."

There has been for several decades a tendency to set up restrictions that have limited to specialists the practice of medicine in hospitals. With the public, the medical profession is now becoming aware of the paradox in such a situation. Steps have been taken to integrate the general practitioner into the hospital medical staff and award him hospital privileges based on his individual demonstrated ability. A well balanced hospital service requires close cooperation, harmony, and diligent effort by all sections of the active staff, and the public service offered cannot be complete and thorough without properly integrated general practitioners who are well trained and who maintain this training.

As stated in an editorial in the Journal of the

AMA Oct. 29, 1950, "The modern graduate, trained in the technics of scientific medicine, can apply his knowledge only if he has access to adequate hospital facilities. The opportunities that it offers for study, scientific practice and association with more skillful colleagues are essential to the young physician who seeks to increase his abilities and better to serve his patients." At the direction of the House of Delegates of the AMA some years ago, the Council of Medical Education and Hospitals formulated standards for the establishment of American boards for the certification of specialists and for the conduct of hospital residencies providing training in the various special fields of medicine. The aim was to improve the quality of training at this level of medical education, but it was never intended that staff appointments in hospitals generally, or even in hospitals approved for residencies, should be limited to board certified physicians, as is now the policy in some hospitals. Such policies, if practiced are detrimental to the health of the people and therefore to American medicine. The main consideration in granting hospital privileges to a physician is that he shall be competent to perform the procedures that he undertakes. In a large hospital it has been found that the percentage of board specialists overstepping their abilities is exactly the same as that for General Practitioners overstepping their capacities. None of us want any physician to undertake procedures which are beyond his ability. The concept of the specialty boards that they would turn out complete and finished doctors is also a mistaken idea and should be supplanted by the philosophy adopted by the American Academy of General Practice that medicine is a life long educational experience, that it is the responsibility of the doctor and the organizations to which he belongs to maintain a continuous program of education throughout his medical life and career. Good judgment and recognition of limitations of professional ability to perform in the various fields of medical and surgical practice are highly essential.

As more hospitals in more and more cities close their staffs to the General Practitioner, it becomes important for the profession to review the trends that led to this pernicious practice so that a noble profession does not degenerate into groups of trade unions, each jealous of its rights and privileges, who flock together for mutual protection against a suspected intruder.

Before the days of specialists each man did as he desired. As technics became more involved and complicated, groups of men felt the necessity for some control so that the unsuspecting patient did not suffer at the hands of an ambitious novice. Then, as the old timers went, these organized staffs made newer aspirants fulfill certain obligations of training. This was a just system, but certain individuals, inordinately proud of this acquired skill took it upon themselves to interpret the rights of this skill by dogmatically stating that all technical procedures performed in the hospital belong to members of that specialty. Since this organized staff made the rules and regulations, this was easily accomplished. However, if the procedure is beyond the skill of a physician and detrimental to the health of the community, it is wrong whether done in the hospital or *in the office*. But, in reality, do these procedures involve as much learning and skill as some specialist profess? Who can deny that in many communities the newcomer is restricted and the older residents have unlimited privileges despite inadequate training?

It is well known that the AMA was established primarily for the purpose of elevating the standards of medical education in this country. And so the specialty groups to promote better medical care—and likewise the American Academy of General Practice, to better train and integrate the general practitioners in hospitals and among his fellow practitioners.

The inability of competent doctors to secure staff appointments has more serious implications today than in the past. The advances in medicine have made it essential for a doctor who desires to remain proficient in his work to be in close contact with new developments in theory and practice. The hospital is the logical focus for this contact. The hospital must use the many devises which make it less burdensome for busy, responsible men with a high degree of medical skill to retain and improve their skill. The hospital must contribute to the doctors' defense against deterioration by providing appointments for maximum numbers of doctors, some of whom must necessarily be restricted in privileges. The hospital must be on the alert for deterioration in its own non-medical group. It must face up to its public relations responsibility if it would discharge its responsibility to the medical profession and the community. Rumor and gossip with consequent loss of confidence almost always occur when the public has not been given positive information. Where the people of a community become nomadic in search for medical care because of fear of their own hospital, the whole community suffers, but most of all the medical profession.

The solution is obvious—let the general practitioner and the specialist realize:

1. That both are important to our system of medicine and both fulfill a spot in the patient's existence that cannot be usurped by the other without detriment to the profession.

2. The majority of the members of the American Academy of General Practice are conscientious practitioners with a full realization of our responsibilities and shortcomings and desire an opportunity to improve them.

3. That the basis of the system now in operation should be on reciprocal referrals.

4. That the time has come for us to mend our roads and fences, because if the patient decides to do it by Federal aid, the round trip of the dollar to Washington and back will leave half of it in Washington.

5. That most of us are general practitioners because of choice and not by default—that we have a cherished memory of past history of general practice and unlimited faith in its future.

HENRY H. TIFT, M.D., Macon

The 101st ANNUAL SESSION

of the American Medical Association

Few experiences in medicine are as interesting, stimulating and informative as attendance at an annual meeting of the American Medical Association. The 101st Annual Session, held at Chicago, June 9 through June 13 was attended by 13,162 physicians, including 67 from Georgia. These fortunate doctors were treated to a magnificent panorama of scientific activities that they will long remember.

This convention has always been a great asset to the medical profession from a public relations standpoint, because each year thousands of lay guests are invited to attend and are awed by the great variety of carefully planned exhibits, each one a demonstration of medical progress. And this year, for the first time, some of these exhibits were seen by millions of Americans from coast to coast on television. These telecasts were conducted in a most interesting manner and received wide acclaim.

Another innovation this year was the "open house" held by the headquarters of the American Medical Association. On each day of the meeting, attractive and intelligent guides were available to escort visiting physicians through the headquarters building and to explain the functions of the various departments. Many doctors who took advantage of these tours were amazed to find out that the American Medical Association offers them many services of which they previously been unaware.

At the convention one could choose between the following activities: the 374 technical exhibits; color television, not only of operations but of clinics covering every field of medicine; continuous program of color movies; section meetings for the various specialties; and the scientific exhibits.

It is difficult to single out any particular outstanding presentation, since physicians' interests vary so widely. There were several exhibits and papers on the use of the hydrazine derivatives of isonicotinic acid in the treatment of pulmonary tuberculosis. Whether or not drugs of this type are the answer to the tuberculosis problem remains to be seen, but it is already clear that they exert an impressive effect on the course of the disease.

A very interesting exhibit was presented by Drs. Aran S. Johnson and his associates, from the Research Department of Harper Hospital in Detroit, Mich. This was a study of the effect of cortisone on the size of experimentally produced myocardial infarcts, and also its experimental use in the prevention of adhesions in the abdomen, pleural cavity, and pericardium. The drug had a marked beneficial effect in both experiments, and it will be interesting to see if clinical use of cortisone for these conditions proves successful.

Advances in cardiac surgery continues at an amazing rate. Drs. T. J. E. O'Neill and Robert P. Glover, of Philadelphia, presented one of the several exhibits on mitral commissurotomy in the treatment of mitral stenosis. Those physicians who are still skeptical about this operation will be interested to know that the above two physicians have now performed the procedure 274 times from February 1949 through May 1952 with an operative mortality of 5.8 per cent. There has been marked and sustained improvement in approximately 76 per cent of the cases.

Another interesting exhibit was a demonstration by Drs. James Kerns and Charles Bridgman of a new technique of embedding gross anatomical and pathologic material in plastic for preservation for teaching material. This method preserves the color remarkably well and is likely to replace the old method of preservation of these specimens in formalin.

Physicians interested in patients with extremities which have been paralyzed by poliomyelitis or other causes were greatly interested in an exhibit by Dr. A. W. Schenker and associates of New York. He presented a technique by which extremely weak muscles can be restored to useful function by rhythmical, volitional movement against measured resistance in small progressive increments.

Without any doubt, the one physician who enjoyed the convention more than anyone was Dr. Joseph B. Wolski of Chicago, Illinois. He won the beautiful Cadillac Club Coupe which is given away each year by one of the pharmaceutical houses to the doctor who holds the lucky number which he receives on registration.

The next Annual Session will be held in New York City, June 1-4, 1953. If you wish to enjoy a pleasant and extremely profitable week, make your plans now to attend that meeting.

—HENRY H. TIFT, M.D.

Abstract of Proceedings

of the

HOUSE OF DELEGATES *of the Medical Association of Georgia*

at

THE 102ND ANNUAL SESSION

in Atlanta, May 11-14, 1952

The Association

First Meeting—Sunday Afternoon, May 11

Dr. W. F. Reavis, President, presiding: The House of Delegates of the 102nd Annual Session of the Medical Association of Georgia will come to order.

I will ask the Secretary to call the roll.

Roll Call

The Secretary, Dr. David Henry Poer, called the roll and announced that more than a quorum had responded.

Presentation of Dr. John W. Cline, President of AMA

PRESIDENT REAVIS: Gentlemen, we have the honor and pleasure of having with us this afternoon a very distinguished physician, Dr. John W. Cline, San Francisco, President of the American Medical Association. It is with deep pleasure that we welcome him and ask him to say a few words. (Dr. Cline addressed the House of Delegates.)

PRESIDENT REAVIS (continuing): I have a matter to call to your attention before we go into the business of the afternoon. This year the House of Delegates, as always, is a legislative body, but this year the House of Delegates has the final say. Your actions are not voted upon by the Association, so your action is final.

So often we have delegates elected who come up and register, and that's about the sum total of their participation in the meeting. If you don't stay here and listen to the reports, if you don't listen to the proceedings that go on, you certainly won't be capable of knowing how to vote or how you want to vote on the final day of this meeting.

The House of Delegates is made up of the duly elected delegates from each county society, including the officers and past presidents of the Association and the delegates to the American Medical Association.

We will proceed with the business of the Association. The first item of business to be taken up ts the reading of the minutes of the last meeting.

The actions of the House of Delegates at the Atlanta Session are herewith abstracted so that the readers may have this information in digest form. The official proceedings are on file at the Association headquarters and are open to any member who wishes to examine them.—Ed.

Adoption of Proceedings of Augusta Annual Session

SECRETARY: Mr. President, the minutes of the proceedings in Augusta have been printed in our *Journal* for the benefit of all the members. I will be glad to read them, but I suggest that since they have been made available to all members, they be accepted as printed.

PRESIDENT REAVIS: Do I hear a motion that the minutes of the proceedings of the last meeting in Augusta be approved as printed?

(A motion to this effect was made, was seconded, was put to a vote, and was carried unanimously.)

PRESIDENT REAVIS: The next order of business concerns the reports of officers. While I am on my feet I will make a short report.

Report of President, Dr. W. F. Reavis

It has been a happy year for me. I told the Council this morning that we have had a very harmonious year and, I believe, a very good year for the Medical Association of Georgia, in that we have been working under a completely new set of regulations. Our Constitution and By-Laws have been changed. We have had a complete change of officers. We are all learning, and I think we are doing fairly well.

One recommendation I should like to make is that the Department of Public Relations be abolished, and that the work of this Department be handled in the central office under the direction of the Secretary, with the advice of the Committee that we now have, in an advisory capacity.

I feel strongly the need for a strong medical practice act, designating qualifications by our own members as well as the practice further of the healing arts. I would like to say that if we don't clean house somebody is going to do it for us.

True, they are qualified, according to our present statute of licensees, to go out after four years of medical training, and with some of them having had less than a year of rotating internship in smaller communities, and putting them up for surgery. They are not surgeons—they are butchers.

I want to say enough to arouse sufficient opinion in the Medical Association of Georgia so that you will be willing to go out and help to put over a good medical practice act through the Georgia legislature that will hold up and also help us. I think when that is done we will all better off.

This can be handled by your Legislative Committee. A very strong Advisory Committee, with a man on it from each district in the State—in fact, we have now a committee of that nature set up to study this. That could be carried on very well, in my opinion.

There is one other matter that your officers would like you to take into consideration. I think it well for all members to express themselves fully and freely regarding our change this year in opening the session on Sunday, and an expression from the House of Delegates will be welcome by the officers of the Association.

My report as your President will be referred to Reference Committee No. 2.

At this time I will ask our President-elect to make his report.

Report of President-elect, Dr. C. F. Holton

Mr. President, I have no formal report. I have enjoyed my period of apprenticeship under Dr. Reavis. I made brief talks at two district meetings, and I have attended all meetings of the Council. I have tried to keep my mouth shut and my ears open.

PRESIDENT REAVIS: We have visiting us today some medical students. I will read their names and will ask them to stand.

The medical students were introduced.

PRESIDENT REAVIS (continuing): Gentlemen, these young men have been invited to sit in at the meetings of the House of Delegates, and we hope this practice will be continued every year. They will get whatever information they can, and will carry it back to their student body, concerning the procedures of the Medical Association of Georgia. Thank you very much for coming, gentlemen.

We will now hear the report of the Secretary-Treasurer.

Report of Secretary-Treasurer, Dr. David Henry Poer

Secretary Poer read his report, marked No. 1, published in May number of The Journal.

PRESIDENT REAVIS: Ths report wll be referred to Reference Committee No. 2.

At this time I would like to name the Reference Committee:

Reference Committees of the House of Delegates

Reference Committee No. 1, Committee on Credentials:
- Ralph H. Chaney, Augusta, Chairman
- Fred H. Simonton, Chickamauga
- Eugene M. Flowers, Tifton

Reference Committee No. 2, Committee on Reports of Officers:
- Victor Roule, Augusta, Chairman
- W. P. Stone, Sylvester
- A. G. Little, Valdosta

Reference Committee No. 3, Committee on Scientific Work:
- George R. Dilliger, Thomasville, Chairman
- Warren M. Gilbert, Rome
- George M. Hutto, Columbus

Reference Committee No. 4, Committee on Public Policy and Legislation:
- C. L. Ayers, Toccoa, Chairman
- Paul T. Russell, Albany
- Charles Eberhart, Atlanta

Reference Committee No. 5, Committee on Economics:
- J. D. Martin, Jr., Atlanta, Chairman
- Marcus Mashburn, Sr., Cumming
- J. M. Byne, Jr., Waynesboro

Reference Committee No. 6, Committee on Miscellaneous Business:
- W. L. Pomeroy, Waycross, Chairman
- John L. Elliott, Savannah
- C. H. Richardson, Jr., Macon

Report of First Vice President, Dr. R. C. McGahee

Mr. President, the services of your First Vice President were offered to our President at the beginning of his term of office. There have been no requests made. I shall be in attendance throughout the meeting to lend any assistance to the President I can within the scope of the duties of First Vice President.

PRESIDENT REAVIS: Thank you. This report is referred to Reference Committee No. 2.

Report of the Committee on Scientific Work, Dr. Richard Torpin, Augusta, Chairman

The program is the report of this committee. I will refer this report by Dr. Torpin to Reference Committee No. 3.

We will hear the report of the Committee on Public Policy and Legislation. Dr. Kirkland.

Report of Committee on Legislation, Dr. Spencer A. Kirkland, Atlanta, Chairman

Legislation of interest to physicians holds a prominent place in Congress at this time, both locally and nationally as well as internationally. The Senate and House Committees in Washington at present are active on a number of measures, some of which if passed would be constructive to the medical profession, others would have a tendency to destroy the freedom of American medicine which we have long enjoyed.

With war clouds still hovering over us and we know not how much money will be needed for defense, it behooves us to deal with economy rather than to try to pass extravagant bills thereby launching the country more and more in debt.

It is my opinion that the taxpayer is not adverse to the necessary money being spent for the defense of the country. So many politicians preach economy but fail to carry out their line of counsel.

Such bills as EMIC-(S-1245 and S-2337) are not economy. This measure served its purpose in World Wars I and II. It is extravagant to have such a bill in Georgia. The emergency Maternity and Infant care of the service men are provided for amply in Georgia through the Public Health, Army, Veterans Administration, Blue Cross and Blue Shield. It has been demonstrated that only a small percentage of the service men really want the service set forth in the EMIC program.

In addition to non-economical bills, we have medical bills proposed which place too much authority in the hands of a few politicians without any reference to the medical profession. Along this line I might mention the Bolton Nurses bill (H. R. 910), educational bill, Social Security Hospitalization for the aged (S-3001) which bill is financed entirely by the Federal Government with no financial contribution from the State. In other words, we have a trend of centralization of power for the medical profession handled by laymen politicians. Since the introduction of the Wagner-Murray-Dingell Bill in 1943. Oscar Ewing and his staff have been ever-ready with new ideas for state socialism.

To every proposed bill with a motive of destroying our present efficient medical set-up, there are five with a helpful, constructive and uplifting motive for medicine. Of course, the good Representatives and Senators in Congress are obliged to way over-balance the evil ones, or we would not be able to boast of the highest standards of health, medical car and scientific medical facilities of any country.

Georgia can well be proud of her Senators and Representatives in Washington. I have had letters from each and every one of them stating their opposition to socialized medicine. We are also fortunate in having a Governor at present who feels exactly as our Washington friends do relative to socialized medicine. I would also like to mention that the Daughters of the American Revolution at their recent meeting in Washington, D. C., went on record as opposing socialized medicine in any form.

We are not proud of the incident mentioned in an editorial by the President of the American Medical Association, in which he discussed fees charged by some surgeons who charge more when there are insurance coverages. There has been an inkling of some few physicians who have developed a penicillin racket and are over-charging for it. This drug is no longer scarce and it is not expensive. The result of this practice is causing patients to go to the drug store and buy a 10 cc. vial and then get a nurse to administer it. I heard of one doctor who had his patients to purchase the penicillin and he would administer it for $1.00 per dose. Some doctors are abusing the voluntary insurance plan. They send a patient to the hospital just because he has insurance, when he could be treated at home. They also let him remain in the hospital longer than he would if he had no insurance.

We still have the advertisement quacks in Georgia, also have Naturopaths, Chiropractors and Osteopaths who overstep their bounds in the practice of the healing arts. Of course, the physicians need a house cleaning also. The ophthalmologists have complained to this committee of the optometrists infringement on their profession.

The Committee feels some of our major problems would be solved if it were possible to pass an act to regulate, strengthen and render uniform the issuance of license to practice the healing arts or any branch thereof in the State of Georgia. To create a board to be known as "State Licensing Board for the Healing Arts": to prescribe the duties of said board; to fix penalties for the violation of this act. Since all of the healing arts have their own boards, to do this would necessitate a joint meeting of all the Chairmen of the Healing Arts Boards and a satisfactory agreement whereby so much quackery could be eliminated in the State. It may be necessary to change our Medical Practice Act some in order to solve our problems. The Committee on Public Policy and Legislation feels that this can be worked out in time.

In 1950 when the General Assembly of Georgia passed a measure providing for mandatory blood tests before marriage licenses could be issued, there was was hope that this would improve the health standards and prevent hasty marriages. The fact that there was not a waiting period and a couple could go through the marriage ceremony in Georgia simply by obtaining a license and hunting up a preacher or Justice of the Peace, brought about the growth of the so-called "marriage mills." A number of these mills sprang up in Georgia on the borders of Tennessee and Florida.

An amendment to the marriage bill designed to put an end to Georgia's border quickie marriage racket was introduced. This bill passed the House by a comfortable majority. By a method of trading, swapping, passing of the long green or something, it was defeated in the Senate in spite of the fact that the bill was sponsored by more than one hundred Georgia organizations including the Georgia Parent Teachers Association and the Medical Association of Georgia.

This bill would have added dignity to the great institution of marriage. It would have provided assurance that children would not be rushed into hasty, ill-advised ,unfortunate and tragic marriages through momentary emotional upheavals; that even adults would not accept marriage vows when under the influence of alcohol which is invariably true in midnight ceremonies, without the benefit of mature judgment and careful consideration. The Committee hopes to be able to pass the three-day waiting period at the next session of the Legislature.

A bill was passed at this session of the Legislature requiring the registration of marriages and divorces with the Statistical Department of the Georgia Department of Public Health. This is, of course, a good move, as there was no central point in Georgia where this information relative to marriage and divorce could be obtained. The Committee succeeded in getting H. B. No. 755 withdrawn. We felt that this would be an infringement on the Board of Medical Examiners. In other words, the points set forth on this bill are already amply cared for by the Board of Medical Examiners.

It seems that the Committee on Public Policy and Legislation has more trouble watching the calendar and preventing the passage of detrimental medical bills than in passing constructive measures.

In 1943, Act 417 was passed by the Legislature authorizing a $1,000 scholarship yearly for four years to young men contemplating the study of medicine. It was necessary for the students taking advantage of this scholarship to sign an agreement to practice for four years, following their graduation in medicine, in a small town designated by the Board of Regents. It seems that the students failed to take advantage of this scholarship as they did not want to tie themselves down afer graduation. Last year an amendment was made to this act, whereby a student of medicine could receive a $5,000 scholarship for four years provided he would practice four years, immediately subsequent to his graduation, in a small town designated by the Board of Regents. This amendment, I understand, will be voted upon by the people in November.

An Act—Act 654—was passed in the 1952 session of the Legislature to admit voluntary patients to the Milledgeville State Hospital. A copy of the letter relative to this act is attached to the report. An Act—Act 795 and H. B. 874—was passed and approved in 1952 amending the Vital Statistics Law. This Act provides a complete and comprehensive Vital Statistical Law.

We all know that the treatment to mentally ill persons in the State of Georgia is a momentous one. We also desire that the medical students in the State receive the best education possible, including care of the mentally ill. An Act—Act 101—was passed by the 1952 Legislature authorizing the heads of the University Medical School of Georgia and Emory University Medical School to investigate the possibility of requiring the third and fourth year medical students to spend at least two months interning at the Milledgeville State Hospital in Milledgeville.

Conclusions: Summary of Acts passed by the 1952 Legislature. 1. Act 654—Milledgeville State Hospital Voluntary Patients.

2. Act. 667—Registration of Marriages, Divorces and Annulments.

3. Act 795—Vital Statistics Law amended.

4. Act. 101—Medical Students: Internship in Milledgeville State Hospital resolution.

5. Registration that did not pass but is still desirable.
   A. A three-day waiting period for Marriage Licenses.
   B. Licensing of Practical Nurses.

6. Other desirable legislation which was not introduced: Legislation to authorize and provide the means for the Secretary of the Board of Examiners to carry out the proper regulation and discipline of the several Healing Arts in regard to the legal conformance to the laws governing the Medical Practice Act of Georgia.

I wish to thank all of the Committee on Public Policy and Legislation for their untiring efforts and diligent help through the year. I also want to thank Dr. Sellers of the Georgia Department of Public Health, Mr. John Dunnaway, the Woman's Auxilliary, the Citizens Committee, Parent Teacher Association and all the other numerous organizations assisting us; also the Doctors, Dentists, Druggists and our many friends in both the House and Senate.

PRESIDENT REAVIS: This report will be referred to Reference Committee No. 4.

Under reports of officers I overlooked the report of the Delegates to the American Mdical Association. Dr. Eustac Allen will report.

Report of AMA Delegates, Dr. B. H. Minchew, Dr. Eustace Allen, and Dr. C. H. Richardson, Sr.

Your delegates were present at every session of the two meetings held last year—the annual meeting at Atlantic City

and the clinical session in Los Angeles. Both meetings were well attended by all delegates and much constructive work was completed.

The plight of the medical schools is a vital issue today. In spite of the failure of the profession to support the voluntary aid to schools, the AMA still believes this to be the best method for its solution. The American Medical Educational Foundation has joined forces with the National Fund for Medical Education and has also urged a fund-raising committee in every state to put this much needed project over the top. The AMA also endorsed in principle the Federal grant-in-aid for medical schools. This limits Federal aid to that for construction, equipment, and renovation of the physical plant. The House of Delegates opposed any aid for instruction or direct aid to the medical students.

The Board of Trustees has approved plans for the appointment of a committe of prominent laymen representing industry, labor, education, law, etc., to act in an advisory capacity in matters of medical care and to present the views of the layman. This is an effort to bridge the gap between the profession and the public.

The matter of hospital accreditation has been satisfactorily solved by the formation of a joint commission (six laymen, twelve physicians) under the sponsorship of the AMA, the AHS, the ACS, and ACP, with the general practitioner having adequate representation. The inspection of the medical aspects of hospital care will be done by representatives of the AMA.

The controversial question in reference to physician-hospital relationship has been clarified. The Hess report, which has been the guide in the past, has been altered and a new statement has been presented in a pamphlet entitled "Guide for Conduct of Physicians in Relationship with Institutions."

The AMA, realizing that "one doctor is worth a thousand words," expanded the physician placement services by setting up funds to "grubstake" physicians who move into rural areas and small towns in need of medical care. These areas will be encouraged to help by offering certain other inducements, such as rent, suitable clinics, etc., to attract these physicians.

The voluntary health insurance sponsored by the AMA is making rapid strides but does not represent the complete answer to our problem. It will be expanded to fill this gap. The AMA has invited the Federal Government to enroll all servicemen's dependents in existing prepaid medical care plans and, if necessary, the government could pay the premiums. This same program can be extended to cover the medical care of the indigent.

Your Association has been trying for years to secure relief from the heavy tax burden of physicians. To convince the tax authorities in Washington that the different professions need some kind of tax adjustment has been almost impossible. In fact, it seems that within the last few years the Department of Internal Revenue has centered its attention on physicians and medical societies. The AMA economists and tax experts are working on several angles. The main project is some form of retirement fund for the professions. Business executives and others can build up such a fund through company financed pension plans but not so with the professional man working for himself. The present plan is to get the existing law amended so that a self-employed person can set aside a reasonable percentage from his annual income as a retirement fund, free from income tax. We have hopes for results. The legal profession is behind such a move and the greater percentage of Congressmen are lawyers.

At the Los Angeles meeting, the House of Delegates was addressed by the National Commander of the American Legion who pledged the full support of the Legion to fight socialized medicine. He said, "You doctors must be the watchdogs of American health." At the same meeting the House of Delegates, led by the Tennessee members, demanded that specific steps be taken to curb the VA's indiscriminate extension of free medical care to any veteran who asks for it with no regard as to his ability to pay. It was a frequently heard remark among the delegates that we have socialized medicine within the framework of the VA, and that it seems that this framework keeps expanding. An all out effort is being exerted to close the door on unlimited veterans' medical care. Many of the delegates feel that we will at last get some positive action.

A new era in medical education was ushered in at the Los Angeles Medical meeting. Doctors in New York and Chicago viewed over colored television, through closed circuit, an operation being performed in Los Angeles and were able to communicate with the physician while he was operating by radio-telephone. The surgeon was able to hear these questions and answer them as they were asked. As this system is perfected, doctors will be able to remain at home and attend a clinic in a foreign city without losing their opportunity of discussion on the operation.

The public relations attitude has definitely changed from a defensive to an offensive position. The tide for socialized medicine has been temporarily halted and the time for constructive action is here. We may have won a temporary victory but we must not relax our efforts. We should coordinate our forces for the battle ahead. For two days before the opening of the meeting in Los Angeles, a great PR program was presented. Definite plans were made to carry on this constructive movement. The time has come when the medical profession must take an active interest in the social and economic problems of the community. We must exercise our rights as citizens. We must not only talk our public relations, but better still, act our public relations.

PRESIDENT REAVIS: This will be referred to Reference Committee No. 2.

We will call now for the report of the Committee on Medical Education and Hospitals.

Report of Committee on Medical Education and Hospitals, Dr. G. Lombard Kelly, Augusta, Chairman

Two meetings were held during the year and during both of them the discussion centered around three principal topics. These are stated below with the resolutions passed concerning each of them.

1. The first matter dealt with was the need for trained hospital executives who would be willing to serve as administrators for the smaller hospitals which have been constructed under the Hill-Burton Act and for a reasonable salary. Graduates of out-of-state courses usually expect salaries that cannot be paid by the communities in which these hospitals are located. As a means of supplying the need of these institutions for trained administrators it has been resolved as follows: That the Atlanta Division of the University of Georgia be requested to undertake the training of hospital executives who would be qualified to serve as administrators of the aforesaid hospitals at a salary commensurate with the ability of the hospital to pay.

2. A considerable amount of time was spent discussing the needs for the training of practical nurses. The discussion was so longthy that it was necessary to adjourn the second meeting of the committee from Sunday, May 11, to Monday, May 12, in order to have the advice of nursing educators before proceeding further. After a long and interesting conference two resolutions were passed by the committee, as follows: First, that the Georgia State Nurses Association appoint a committee on Nursing Education and Hospitals to serve with our committee and that the Georgia Hospital Association be requested to send a representative to take part in the various meetings of the two groups. Second, that this committee call to the attention of the House of Delegates the importance of having enacted into law a bill which will provide for the training and licensure of practical nurses and that the House of Delegates request the Public Relations Department to bring this proposed legislation to the attention of the members of the Medical Association of Georgia; also that the House of Delegates enlist the aid of the Committee on Legislation in having the proposed bill enacted into law.

The third topic discussed was the Hospital Construction Program under the Hill-Burton Act. After due discussion three resolutions were passed as follows: First, that endorsement be given to the principle that the regional and base hospitals of the state be improved so as to provide for educational, research and specialized services to supplement basic services available in the smaller hospitals. Second, that

endorsement be given to the philosophy that the state agency administering the Hill-Burton Act require a detailed survey and review of the financial and medical resources as well as the potential patient reservoir of all communities desiring hospital construction under the Hill-Burton Act prior to the approval of an application for grant-in-aid funds for that community. Third, it is recommended that the suggestion be made that political subdivisions be encouraged to form multi-county or multi-unit hospital authorities and that the smaller hospitals be encouraged to affiliate with the larger hospitals in order to provide more complete hospital and medical care.

PRESIDENT REAVIS: I will ask Dr. Kelly to turn this paper over to Reference Committee No. 3.

Next is the report of the Committee on Medical Defense. I will ask Dr. Mashburn, a member of this Committee,to make the report.

Report of Committee on Medical Defense, Dr. Marcus Mashburn, Sr., Cumming

PRESIDENT REAVIS: This report will go to Reference Committee No. 1. Next is the Committee on Professional Conduct. Dr. Chaney.

Report of Committee on Professional Conduct, Dr. Ralph H. Chaney, Augusta, Chairman

The Committee met at Macon, May 23, 1951, and discussed the general aspects of the problems which might be referred to it for consideration and made arrangements to meet at any time later if any situation could not be settled otherwise.

During the year only one complaint was registered directly with the Committee. Following investigation this complaint was settled on the county level without any action having to be taken at a called session of the committee. The correspondence concerning this case is attached so that it may become the permanent record of the Association.

PRESIDENT REAVIS: Thank you, Dr. Chaney. This is referred to Reference Committee No. 1.

Committee on History and Vital Statistics, Dr. J. Calvin Weaver, Atlanta, Chairman

Our memorial service for 1952 reminds us that another year has passed, and at this time the names of the deceased were read.

It also impresses on us how large the Medical Association has grown to be, in the light of the fact that seventy-four of our valued and beloved members, since our last meeting at Augusta, have passed on and upwards into their Valhalla, their palace of immortality, in which the souls of heroes slain in battle dwell.

I say "Valhalla—souls of heroes slain in battle" advisedly, for there is no gainsaying the fact that nearly every doctor is a hero and that with few exceptions doctors are slain in battle of duty to suffering humanity. Automatically they have passed into the category called history. I sincerely hope that each one's name will be listed eventually in the Georgia Medical Association's hall of fame with a record of their achievements.

The last twelve months have been very happy ones for your Chairman and withal very busy ones.

Let me impress on you that most of my time not spent in the actual practice of medicine has been utilized in research for data on the medical history of Georgia.

You may be assured that the assignment has been no easy task; as one of our most prominent surgeons remarked to me, "No one but you would do it." Be that as it may, it has at least been done in the spirit of the motto of the *Worlds Work* magazine which reads: "To work we love we rise betime and go to it with delight." Let me remind you of much discouragement along the way; certain letters written to intelligent and outstanding members, deserving a courteous reply, have been entirely ignored. On the other hand, a few, a very few, have been courteous and cooperative, and have furnished data of their lives and achievements.

Such a report as this is not intended as a medium for a brief on the value and importance of medical history. I do want to pass on to each of you a paragraph of a letter from our lamented and much loved member, Dr. Walter W. Daniel of Atlanta, under date of February 17, 1951:

"Dear Dr. Weaver: I want to thank you so much for sending me the historical sketch on Daniel Drake. I have read and enjoyed it very much. I wish more doctors would take time out to study a little bit about the cultural background of medicine; I think it would take out a lot of the struggles and strife that exist between the doctors and give them a little different type of thinking."

To be in position to get away from the old stereotyped statement of many reports "making progress" is very gratifying. Your Medical History Committee has been very active and has made definite headway.

Dr. Frank Boland has written and published in the Journal of the Medical Association of Georgia an article entitled "Medical Schools Which Eventually Became Emory." (Published in J. M. A. Georgia, September, 1951.)

As the history of the Savannah Medical College, also the history of the University of Georgia Medical College, have already been written, that about covers the medical colleges of Georgia. We have only a few fragments about Oglethorpe Medical Department and the Reform Medical College started at Forsyth and eventually moved to Macon.

Last year your chairman promised to do the history of Georgia as a province. It has required lots of work and research, but this period combined with a former article on The Medical History of Georgia as a Colony, carries us from the beginning of Georgia on through the Revolutionary War. With this finished, we now have the green light for Georgia as a State.

Beside the above, your Chairman has written and published in or Journal an article on the Life of Dr. E. N. Calhoun and Sons; he has also written a Sketch of Thomas Holley Chivers, Doctor-Poet, which was read before the DeKalb County History Club. I have also promised an article on the lives of the early doctors of DeKalb County for December and am also working on "The Development of the Hypodermic Syringe," which will have quite a bearing on Georgia as Dr. William Alexander Green of Americus was the first doctor in America to write extensively on the hypodermic syringe, while our own Dr. Fred Rudder perfected the syringe for giving pentothal intravenously, which is being used throughout America and certain foreign countries.

We have managed to locate thirty-two books written by Georgia doctors which should make an interesting chapter within itself.

Personally I am still of the opinion that the completion and compiling of the Medical History is a one-man job and that the Association should have had all along an official historian.

This will hold for the future as well as for the past.

(Dr. Boland read the report, marked No. 6.)

PRESIDENT REAVIS: Thank you, Dr. Boland. This is referred to Reference Committee No. 1.

Committee on Maternal Care. Dr. Sharpley.

Committee on Maternal Care, Dr. H. F. Sharpley, Jr., Savannah, Chairman

Education was the overall answer to the big question of 15 to 17 years ago, when the profession and the general public were alarmed and searching for the answer to the question "What is the cause of the high maternal death rates?" 60,000 births with 500 to 600 maternal deaths per year. Georgia's rates were 11 per 1,000 live births, whereas nearly 100 years earlier, Semmelweis' figures, with his doctrine of contagion, were 12.7, if an interpolation is permitted between his percentage and the live birth rates. The colored rates did exceed his in 1930.

The Medical Association of Georgia was confronted with an undertaking that was staggering, maternal deaths before delivery, place of delivery, midwives, place of death, county lines, state lines, hemorrhage, anesthetics, induction of labor, birth and death certificates, forceps, embolism, pneumonia, unknown deaths, cesareans, puerperal fever, finances, race, unknown attendants, those not seen before death, tetanus,

eclampsia and syphilis. All to be catalogued as well as read the hand writing and compile the replies to the questionnaires. These questionnaires were designed usually to emphasize the elimination of unnecessary innocent surgery with the substitution of conservative births as well as endeavoring to substitute for the vaginal examination, an aseptic field of birth. Only an occasional well meaning advisor was encountered in those days offering excellent advice on one item or another (pituitrin for instance).

Today the picture has greatly changed. The high and mid forceps have practically disappeared. Relaxation in labor and conservatism have come to the forefront. The number of white midwives has decreased from over 300 to 77 and the colored midwives by about 50 percent while the physician attends today 55,000 white births. The midwife attends less than 1,000, an 80 percent decrease in white midwife practice. Today the number of colored births are attended by 50 percent midwife. Formerly, the midwives handled 75 percent of these cases. Maternal deaths have dropped to 44 white and 89 colored, while the number of advisors have so greatly increased that any work by the Maternal Committee is seriously and greatly handicapped.

There is a great difference between 15 years ago and today. Because the Maternal Committee previously used questionnaires, why should this Committee be the pioneer foundation in the production and distribution of Questionnaires, Incorporated. Once a questionnaire, always a questionnaire? Cannot these questionnaire advisors see the changes that time has wrought, both major and minor?

Then as now, education was and still is the answer. Formerly it was indirectly used in the form of questionnaires. Today it should be directly used. Who is hiding information that should be distributed to prevent a maternal death?

Georgia's maternal mortality rate is the lowest in the state's history. On the basis of 1,000 live births, the total is 1.5, the white is 0.8 and the colored is 2.7. This decrease in the maternal rates has been steadily downward. So far, no rebound has occurred. This considerably lowered maternal death rate took place while the live birth rate increased from 60,000 to 89,000 which clearly indicates that there is less risk of death from birth. White maternal death rates alone have decreased from 11 to .8 of 1 mother per 1,000 live births. This so clearly indicates that some direct system of education is essential, whereas, if questionnaires were used, which the questionnaire advocates do not realize, that is, that it would take at our present maternal death rate, 22 years for a questionnaire to reach each Georgia physician and then would cover only one of the multiple maternal troubles or causes of death. The same physician does not lose a maternal patient every month. He loses one here and another there every 5 to 10 years apart. We must remember that when questionnaires were previously used, they reached 500 or over deaths per year.

Thoughts by this Committee must run along lines of prevention. If 133 after death questionnaires were sent per year, it would take 706 years to reach all the live births. Whereas, some system of direct education would reach 94 percent of the white and 40 percent of the colored births at the hospital alone. I am most sure that all operative obstetrics is institutional, believing of course that cesareans are not done at home. Therefore, a direct educational plan will contact 66,000 of the live births in Georgia as well as all the operative obstetrics.

Maternal mortality today is not the affair of the general public. It is a professional matter, although the general public is in need of more education, which today should come through the physician. For example, they demand a cesarean merely because they desire sterilization. If one should die, the Maternal Committee sends a questionnaire, whereas 19 other identical cases occurred that day in Georgia, each a potential addition to the maternal death list, last year, this year and next year.

Therefore, an educational plan is the one of first choice. One that includes the physicians, the nurses and the institutions. Therefore, be it proposed that a small placard bearing an educational item in color be replaced with another of different color and item at monthly or bimonthly intervals above every scrub basin in the state of Georgia, to be read at every Society meeting and to be published in the Journal.

For example:

April

TOXEMIA, DEAD BABIES AND THE RH FACTOR ARE NOT INDICATIONS FOR CESAREAN SECTIONS.

May

IF YOUR REASON FOR AN INDUCTION OF LABOR IS CORRECT, DO NOT PROCRASTINATE. INDUCE LABOR CORRECTLY THE FIRST TIME AND DO NOT REPEAT.

June

STERILIZATION IS NOT AN INDICATION FOR PERFORMING A CESAREAN SECTION.

The doctor with the maternal death is written and asked if these placards were posted in his institution, and if he replies in the negative the institution is written for a reason for not posting same. If the death occurs outside an institution the doctor is asked if he has seen same in the Journal or otherwise. In both instances, he is asked how they could be rewritten, deleted or added to. In this fashion, every Georgia physician could participate without involving or making any connection between the Committee and the death at hand and this is a very important item. Medical liability policies in Alabama are 26 per cent higher than Georgia and the Tennessee premium is 100 per cent higher than Georgia. The expense to the insurance company is the basis for the increase. Their expenses are law suits. Why flirt with increased liability premiums in Georgia?

Likewise, an educational step in this direction is not expensive, no more expensive than the cost of some postage and printing. The same as required for the questionnaire method.

This plan is now 4 years old and this is the first opportunity I have had to present it in full because a new and unseen factor has arisen in maternal mortality, namely, as the maternal deaths dropped each year, the occasional well meaning scientific advisor of 15 years ago has increased or grown into an advisory group of no little proportions today, not entirely dissassociated from politics.

It is odd that following the mere mentioning of an educational program, this Committee was oozed out slowly. The educational method, however, was not the point in question. The questionnaires were the real issue. They got caught between the scientific and political viewpoints which left the advisors free to manipulate. And also, at the onset of this year I did not inherit any questionnaire system already in operation.

Since the Georgia physician is accustomed to statistical questionnaires, any questionnaire adopted now for other than statistical purposes might take unfair advantage of him, unless appropriately marked. When questionnaires leave the adding machine, they cease to be statistical. The word "confidential" means "passed in confidence" yet might reach the Pacific ocean in a whisper. There has been a spirit of cooperation between the members of this Association and the Maternal Committee built out of the past, which should not be sacrificed because a questionnaire was not originally designed to meet the appropriate situation in Georgia.

It is not fair for any committeeman to judge a questionnaire from his own home town. The trial judge should excuse himself. I note that in Alabama the questionnaires are numbered and passed on to a committee of obstetricians for judgement.

The problem of the percentage of returned replies always confronts the chairman. I feel sure that this percentage will fall with this type of questionnaire. When any drastic step is taken to increase the percentage of replies, the responsibility of the chairman rises. Where there is a death, there may be a blame. Any leakage in the collection system may give the impression that the physician is being checked. I was told that, one year ago in Washington, D. C., that 1 out of

every 5 physicians was being sued. What redress has the individual physician if he should feel that the committee made a mistake, besides bringing increased publicity upon himself?

As Chairman of this Committee, I do not believe that this questionnaire would be fair to the members of the Medical Association of Georgia, and I do not choose to attempt to put it into action.

An educational method taking advantage of the modern shifts in Maternal Mortality was again proposed and this time was ground to pieces in a printing press. A copy of the minutes of the Maternal Mortality Committee uncorrected for errors and omissions and unbeknown to the Chairman, strayed off to the presses of the Journal of the Medical Association of Georgia, thus ending another tragic chapter in the history of the educational method. A method that so far has received not one harsh word nor one bit of criticism.

RECOMMENDATIONS

1. Be it proposed that the Committee draw up twelve suitable educational items, each to be placed on a placard in color. The item and the color to be changed on a monthly basis and to be posted above every scrub basin and read before every County Medical Society in the state of Georgia and to be published in the Journal of this Association, with a follow-up as each death occurs. The printing, stamping and mailing to be executed by the State Department of Public Health working in cooperation with this Committee.

2. Be it proposed that a statistical study be kept by tabulating from the birth certificates, death certificates and stillborn certificates by the State Department of Public Health for the purpose of keeping the Committee posted, so that a bead can be drawn on the remaining maternal deaths, especially regarding their causes and distribution.

3. Be it proposed that any corrective procedure deemed best applicable, according to the findings of the described study (No. 2 above) to be left to the discretion of the Committee at a future date.

In conclusion, let us not forget that this is a scientific committee. This committee should function scientifically with less interference and more co-operation.

PRESIDENT REAVIS: Thank you, Dr. Sharpley. This is referred to Reference Committee No. 3.

I am going to entertain a motion in a few moments that probably will cause some hardship upon some of the members. If for any reason the chairmen of these committees cannot be present at a later meeting to present their reports, it might be well to have them either presented in writing or to have another member of the committee make the report.

Next is the report of the Committee on Public Health, by Dr. J. C. Brim, Pelham, Chairman. Not available.

This completes the reports of standing committees. We have a few other committees to hear from.

PRESIDENT REAVIS: Dr. Brown. This is the report of the Public Relations Committee.

Report of Committee on Public Relations,
Dr. Stephen T. Brown, Atlanta, Chairman

As Chairman of your Public Relations Committee, I should like to emphasize the important factors governing the success of any PR program. These include (1) the defining of specific objectives to be accomplished . . . both immediate and long-range . . . and (2) the carrying out of carefully laid plans to attain those objectives.

During the year just past, the objectives of this Association's PR program have been threefold: (1) To serve and to inform adequately the members of the true ideals of the Association and the value of membership therein; thus soliciting their active support of its policies and program; (2) To convince the public that the medical profession is not only sincerely and actively concerned in seeing that high quality medical care is available to each community, but, also, sincerely and actively concerned in seeing that such care is available when and where needed at a cost in keeping with each individual's economic status or without cost in unusual and extenuating circumstances, and (3) To encourage and assist district and county medical societies to continue expansion of their public relations activities, thereby cementing physician-patient and community relationships at the very grass roots.

It is my sincere belief that our PR Department during the past year has taken pronounced strides toward attaining these goals. To be frank . . . and I think you will agree . . . such worthy objectives hardly may be attained in the short space of one, two, or even five years. Such a task would be impossible when one considers the physical and psychological barriers to be hurdled on the part of our physician-members, as well as the public at large.

The tools used by our PR Department in its effort to assist members, the public, newspapers and radio representatives to understand our program perforce have been varied. Furthermore, when one carefully analyzes the PR program, always with the desired objectives in view, invariably it will be found that every project-tool along the way tends to "work together for good" for everybody concerned . . . our physicians, the newspapers, radio as well as the lay public.

In consideration of our long-range PR goals, I should like briefly to hit the high points of the activity undertaken by the PR Department during the past twelve months:

1. Our attention-getting exhibit booth at the Southeastern Fair in Atlanta, Sept. 27-Oct. 7, 1951. The exhibit, as many of you know, was entitled "Medical Quackery" and was obtained from the AMA Bureau of Exhibits, which also furnished staff members for lecture purposes at the booth during the Fair. In excess of 2,500 people are known to have visited the exhibit, and, we assume, were made conscious of the fact that the Medical Association of Georgia, through the American Medical Association, has the public's interest at heart in exposing the multitude of dubious medical devices, frequently flooded on the market. A supply of 1,500 pamphlets entitled "You Can Have a Doctor" was distributed during the course of the Fair, as was a circular describing the Fulton County Physicians Emergency Call Service. The Atlanta Journal gave a four-column news spread, with pictures, to the exhibit.

2. The Second Annual Medical Press and Radio Conference in Macon, October 26, indicated to an even greater degree that cooperation between those media and the Association is an accomplished fact. The meeting was enthusiastically attended by members and press representatives alike, and news stories, both preceeding and following the Conference, were expertly handled. The newspaper clipping service to which our Department subscribes has been a dependable gauge to measure the increasing cooperation between the news media and the Association.

3. The establishment in our PR Department of a Physicians Placement Service, to aid Georgia communities without doctors, received astounding news coverage throughout the state and continues to serve as a basis for frequent news articles. To date 37 communities of various sizes have contacted the PR Department, furnishing specific details on their areas, and such information has been forwarded to 53 inquiring doctors, both in and out of state, who have expressed a desire to locate in Georgia areas where physicians may be needed. Since January we have been notified that five doctors have established themselves as a result of information supplied from our Department.

4. The PR Department's service to Association members, aspects of which have myriad facets, has included resumption of a revamped monthly PR News Letter, the object of which has been to localize medical news of national import, and to tailor its presentation specifically for Georgia physicians; the compiling of a legislators' card file, indicating the attending physicians of state and national legislators . . . (needless to state, such information may prove invaluable to the Association in times of legislative stress affecting the medical profession); the initial attempt by the executive secretary to carry an understandable PR program on grass roots level to individual county medical societies; and the sending out of a weekly "Health Talk" via the Georgia Press Association, used extensively by the weekly newspapers and justifying our feeling that it be continued.

It is my contention that the PR Department has worked under a handicap this past year, with Mr. Sid Wrightsman, Jr., faced with the necessity of serving in a dual capacity as executive secretary of both the Association headquarters office and the PR Department. Considering that a major portion of his salary was allotted from the PR budget, it is

the Committee's feeling that Mr. Wrightsman's services were not sufficiently devoted to PR per se. Nevertheless, I believe that the separation of the office of the Association Secretary from that of the PR Department is an impossibility; that the PR Department should be entirely encompassed by the work of the executive secretary of the Association, and that he should direct all work. Fuerthermore, I feel that the PR Department should have the services of a full-time man, who could devote his schedule entirely to PR matters and visit each county and district society periodically throughout the year, and that he, under the direction of the executive secretary of the Association, carry out such activities with a PR Committee to act in an advisory capacity.

I am willing, and so would anyone else be willing to go forward as we have done in the past. But at the same time, I feel that greater results may be obtained by relegating the Public Relations Committee to purely an advisory capacity, rather than one of directional. I feel that the Council should furnish funds necessary to carry on the work of the PR Department as part of the function of the headquarters office. In that way, the executive secretary may direct, with the Committee's advice, the activities of the man selected for the PR work.

We should like to express regret over the resignation of Mrs. John Maltbie, who served the PR Department so faithfully.

Our PR Department has been honored to serve Dr. W. S. Dorough and his Insurance and Economics Committee. As major Association outlet for information on *The Georgia Plan,* the efforts of our PR Department in its behalf have helped further participation among our members as well as among representative insurance underwriters operating in Georgia. It need not be added that the promotion of voluntary prepayment health insurance as opposed to compulsory health plans, is and will continue to be a challenging project in any medical public relations program.

PRESIDENT REAVIS: Thank you, sir. This will be referred to Reference Committee No. 6.

Gentlemen, under our new Constitution and Bylaws by a majority vote of the House of Delegates we may change our procedure. If the delegates wish to adjourn now until after supper, and come back and finish its business, I will entertain a motion to recess now.

DR. JACK NORRIS: Mr. President, I so move.

DR. ELLIOTT: I second the motion.

The Fulton County Medical Society is giving the delegates and their wives a dinner at six o'clock. What are your wishes?

(The motion was put to a vote and was carried unanimously, and the meeting recessed at 5:40 p.m.)

JOURNAL *Production Techniques To Get* FULL-TIME *Supervision*

Technical facets involved in the production of any first-class publication are myraid and assuredly require continuous on-the-spot "know-how" of a specialist trained in that direction . . . certainly, if a standard of excellence is to be maintained.

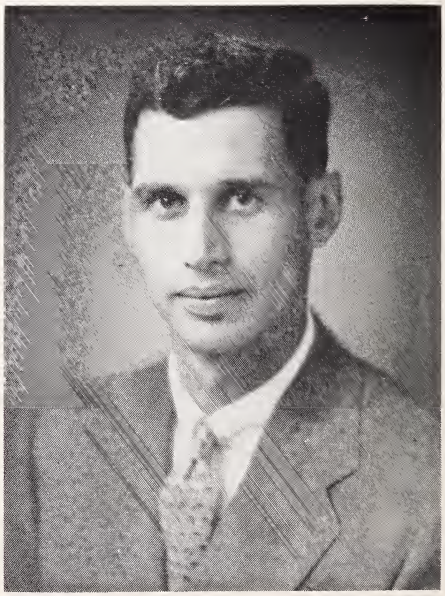
The Journal of the Medical Association of Georgia is no exception. And the Council, aware of that fact, on July 1 employed on a full-time basis Milton Davis Krueger to serve as Journal managing editor, as well as director of all Association publications.

A 30-year-old Chicago native, Krueger has been serving at Emory University for the past two years as a journalism instructor, consultant in typography and graphic arts, and photographer.

He obtained both B.S. and M.A. degrees in journalism, doing undergraduate work at Northwestern University and Oklahoma City University, and graduate work at Oslo (Norway) University and the University of Missouri.

As for additional professional experience, his background is rich with it: reporter-photographer on Oklahoma newspapers, assistant printer with the Oklahoma City University Press, and journalism instructor at the University of Missouri.

Krueger presently resides in Decatur, is married, and has a 2½-year-old daughter. He will direct all editorial activities at the Association headquarters office.



MILTON DAVIS KRUEGER

News and Information

ANNOUNCEMENTS

The First Annual Statewide Conference of the Better Health Council of Georgia will be held September 25-26, at the Academy of Medicine, Atlanta. Dr. F. S. Crockett, chairman of the AMA Council on Rural Health, will be the major guest speaker.

The Southeastern Regional Meeting of the American College of Physicians will be held in Havana, Cuba on November 7-8. This meeting precedes the Southern Medical which is to be held in Miami, on November 10. All Fellows and Associates of the College and friends of the College are invited to attend.

SOCIETIES

DeKalb County Medical Society held its annual get-together on June 11, when more than 100 doctors and their guests attended a barbecue.

Fulton County Medical Society at its June meeting welcomed 40 new members, who increased its membership to 750, and voted to meet once a month instead of twice, as it has been doing. Meetings in the future will be held the first Thursday evening of each month. At its June meeting the society heard Dr. L. Minor Blackford discuss isotopes.

Georgia Medical Society professional program for June 10 was highlighted by a prepared case report on "Innomininate Artery Aneurysm" presented by Dr. R. B. Gottschalk and a scientific paper on "Tumors of the Thyroid Gland" by Dr. William H. Lippitt.

Ware County Medical Society at its June 5 meeting heard a paper on Scurvy, the nutritional disorder caused by lack of adequate amount of vitamin C in the daily diet. The paper was by Dr. Clayton M. Massey, Waycross pediatrician, and Dr. Neal Yeomans, local radiologist. Dr. W. F. Reavis, retiring president of The Medical Association of Georgia, reported on the recent state convention and progress made in the medical program during the recent administration.

Muscogee County Medical Society combined its regular May meeting with the Georgia chapter of The American Cancer Society and presented a symposium on cancer. Participants in a panel type discussion of the more common types of malignancy and an outline of the present status of radioactive isotopes were Dr. Thomas Harrold of Macon and Drs. Allan Foracker, Charles Hughuley, Wadley Glenn and Sam Wilkins, all of Atlanta. Dr. Elliott Scarborough, Director of Winship Clinic, Emory University Hospital, presided as moderator and as a speaker.

Illustrative case presentations of the more frequently encountered types of malignancy were given by Muscogee County Society members Drs. A. B. Conger, John G. Durden, Jr., Hugh J. Bickerstaff, Luther Wolff, William G. Love, William F. Jenkins, C. W. Henderson, S. A. Roddenberry and W. S. Clifford. The session was held at the Ralston hotel where the Ladies Auxiliary also met.

In June the Muscogee County Medical Society presented a program devoted entirely to a symposium on public relations and medical economics.

PERSONALS

Dr. John T. Arnold, of Parrott, was honored on May 29 by the Dougherty County Medical Society and on June 19 by the Third District Medical Society for his 52 years of practice in South Georgia.

Dr. Robert A. Burns, of Blue Ridge, has been called to service with the Air Force. On July 1, *Dr. Jerrald Singleton,* formerly of Wilson, N. C., took over Dr. Burns' clinic and practice. When Dr. Burns returns to Blue Ridge, the two physicians plan to enlarge their clinic facilities and practice together.

Dr. Richard P. Campbell, formerly of Rockmart, has opened offices in the Pioneer Building, Cedartown. For the past two years he has been engaged in practice in Fayetteville.

Dr. Henry Grady Carter, Jr., of Atlanta and Decatur, announces the opening of his office for the general practice of medicine at 459 Candler Road, S. E., Decatur.

Dr. Walter C. Earle, of Atlanta, was awarded a citation of merit by the University of Chicago. Dr. Earle directed public health and sanitation efforts in Central and South America. He is now chief of the professional division of the Atlanta area medical office of the Veterans Administration.

Dr. Fred Harper and Dr. R. A. Pumpelly, of Jesup, returned from New York City on May 26 after completing a 60 day course in Gynecological Surgery and Obstetrics at New York Polyclinic.

Dr. Paul Thomas Manchester is now associated in the offices of Drs. F. Phinizy Calhoun and F. Phinizy Calhoun, Jr., in the Doctors Building, Atlanta.

Dr. Sam Patton, of Macon, was installed as president of the Georgia Tuberculosis Association at the three-day convention in Macon.

Dr. William T. Richards and Dr. W. Parks Phillips, of LaGrange, announce the removal of their offices to 107 North Lewis Street, LaGrange.

Dr. Henry Haywood Turner, of Columbus, was the speaker at the Columbus Lion Club meeting held May 26 in the Ralston Hotel at Columbus. The subject of Dr. Turner's talk concerned the objectives of the Muscogee County Medical Society.

Drs. Osler A. Abbott and William A. Hopkins, Emory University Hospital, Emory University, announce the association of Dr. William E. Van Fleit with them on July 1. Practice is limitd to Thoracic Surgery.

DEATHS

BAIRD: *Dr. Noah W. Baird,* of Atlanta, died June 24 after suffering a heart attack several days before. A native of Henry County, he had practiced in Atlanta about 35 years. Attended University of Georgia and received medical degree from Emory University School of Medicine in 1915. Former president of Atlanta Board of Education.

BROWN: *Dr. Stewart Dixon Brown,* 71, Royston physician and surgeon, died May 30 after an illness of several days at Royston's Cobb Memorial Hospital. Dr. Brown was superintendent of that hospital, which was built by the famed baseball player, Ty Cobb, as a memorial to his parents; Dr. Brown and Mr. Cobb were old friends. A native of Royston, Dr. Brown attended Alabama Polytechnic Institute, Auburn, and was graduated in 1907 from the Atlanta College of Physicians and Surgeons, now Emory University School of Medicine. After taking postgraduate work at Johns Hopkins University, he began practicing medicine in Royston in 1912.

FREDERICK: *Dr. Donald B. Frederick,* 73, of Marshallville, died June 14 after a short illness. A retired physician, Dr. Frederick was graduated from the University of Virginia Department of Medicine, Charlottesville, Va., in 1900. He had practiced in Marshallville for many years.

HUTCHINSON: *Dr. Lee Roy Hutchinson,* 61, of Adel, died June 1 in the Adel Memorial Hospital. His health had been poor for the past two years. Born near Adel, he graduated from Emory University School of Medicine in 1913. He was connected with the Adel Hospital at one time and in recent years operated a clinic of his own which he closed when the Adel Memorial Hospital was opened. He was on the staff of this hospital until his health failed.

PETTIT: *Dr. James K. Pettit,* 63, of Atlanta, died May 22 at a veterans hospital. Dr. Pettit, nationally known psychiatrist, was a native of Gilmer County. He was connected with the Veterans Administration in Atlanta. He graduated from Emory University School of Medicine in 1914.

HOSPITALS

The new, modern, two-story brick Emanuel County Hospital at Swainsboro was dedicated in ceremonies attended by Gov. Talmadge June 1. Costing $591,790, this hospital will be directed by Mr. Ernest Fiedler under the administration of the Emanuel County Hospital Authority. The hospital will serve Emanuel county and the surrounding trade areas.

Dr. B. J. Roberts, of Cornelia, was named president of the group of doctors who will use the facilities of the new Habersham County General Hospital. Dr. J. L. Walker, of Clarksville, will serve as vice-president, and Dr. G. T. Nicholson, of Cornelia, was named secretary-treasurer for the group.

Dr. James F. O'Daniel has been appointed chief surgery resident at Macon Hospital, Wiley Jackson, hospital superintendent, announced.

In an address before the staff of the Veterans Administration Hospital, Dublin, and the Laurens County Medical Society on June 10, Dr. Charles R. Prince spoke on the subject "Management of the Urinary Tract Complications of Myelodspasia and Spina Bifida." Dr. Prince is a urologist in Savannah.

PUBLIC HEALTH

The U. S. Public Health Department held a regional meeting in Birmingham May 22, for the purpose of discussing public health aspects of heart disease control. Alabama, Florida, Georgia, Mississippi, South Carolina and Tennessee were represented by authorities in the field.

Dr. John Venable, of Griffin Tri-County Health District, has been appointed Director of the new Division of Training, Georgia Department of Public Health. Dr. T. F. Sellers, Public Health Director, also named Dr. Helen Bellhouse to head the Maternal and Child Health Division.

New health centers recently dedicated are the Meriwether County Health Center, Greenville; Wayne County Health Center, Jesup; Gwinnett County Health Center, Lawrenceville; and Burke County Health Center, Waynesboro.

Dr. R. A. Vonderlehr, of Atlanta, who is the U. S. Public Health Medical Director of Region VI, served as chairman. Georgia doctors participating in the program were Dr. J. Gordon Barrow, of Atlanta, Director of the Grady Hospital Heart Clinic; Dr. Dan Bowdoin, of Atlanta, director Division of Heart Disease Control, Georgia Department of Public Health; Dr. Thomas L. Ross, Jr., of Macon; Dr. Bruce Logue, of Atlanta, Associate Professor of Medicine at Emory University; Dr. John B. Hozier, of Atlanta, Chief, Office of Medical Programs USPHS Region VI.

Dr. Rufus F. Payne was named to head the new 14 million dollar state general hospital to be constructed in Augusta. His appointment was announced by the Georgia State Board of Health. Dr. Payne will take charge of the Augusta project in September.

SCHOOLS

Seventy-six young doctors were graduated June 7 at the commencement exercises of the Medical College of Georgia. Out of the 76 members of the graduating class, 24 received commissions in either the Air Force, the Army or the U. S. Navy. Drs. James Aubrey Kemp, Augusta; William E. Harden, Montezuma; and James M. Skinner, Covington, graduated "with honor."

Commencement speaker Dr. Willis J. Potts of Chicago was introduced by Dr. G. Lombard Kelly, president of the Medical college. In addition to the degree of doctor of medicine, the master's degree in science and in medical art was conferred for the first time at this commencement.

Emory University School of Medicine conferred 68 doctor of medicine degrees at evening exercises June 6. Dean R. Hugh Woods administered the oath of Hippocrates. Of the 68 graduates, 38 will intern at hospitals in Georgia.

A three day medical clinic sponsored by the Emory University Medical Alumni Association was held June 4-6. More than 50 medical and surgical lectures were scheduled. The clinic closed with the annual banquet at the Capital City Club.

Grants were awarded five Emory University professors to finance research in health sciences. The recipients and the amount of each grant as announced by the Public Health Service in Bethesda, Md., are as follows:

Dr. J. D. Martin, Jr., professor of clinical surgery, $8,100 for research in the use of ACTH in burns; Dr. Phillip K. Bondy, associate in medicine, $7,333 for research in the effect of growth hormone on carbohydrate metabolism; Dr. J. Spalding Schroder, associate in medicine, $4,698 for a study of excretion of gallbladder contrast media.

The National Institute of Neurological Diseases and Blindness granted Dr. Marion Hines of Emory $4,347 for a study of patterns of organization of tendon reflexes.

Dr. Daniel C. Elkin, chairman of the department of surgery at Emory University School of Medicine, received an honorary doctor of science degree from Northwestern University on June 16 at its commencement exercises.

Dr. Virgil Preston Willis Sydenstricker, professor of medicine at the Medical College of Georgia, was honored at a testimonial dinner June 2 by his colleagues. Celebrating his 30 years of service as professor of medicine at the Medical College, Dr. Sydenstricker was presented a Certificate of Merit "for outstanding work in the field of medicine." In the presentation, Dr. G. Lombard Kelly, president of the Medical College, said that Dr. Sydenstricker is the only full-time professor of medicine in the United States who has held the chair of medicine for 30 years. Dr. W. J. Cranston, who paid tribute to Dr. Sydenstricker, presented him with a handsome gold watch, a gift from his colleagues.

LETTERS

Barnesville, Georgia
June 17, 1952

To the Editor:

I noticed in the Atlanta Journal this afternoon that the Third District Medical Society is paying a very deserved tribute to Dr. John T. Arnold, Parrot, Georgia, in recognition of his fifty-two years' service as a country Georgia doctor. An additional statement that Dr. Arnold, who is seventy-seven years old, is the only Georgia doctor who has delivered three sets of twins the same night in the same town.

I was born February 20, 1877, graduated from the Medical Department, University of Georgia, in April, 1898, and am seventy-five years old, and have actively engaged in the practice of medicine ever since, and still am. I delivered three sets of twins in Barnesville, Georgia, between 6 a.m. and 8 p.m. the same day in the same town. They were three boys and three girls and all lived and grew into young womanhood and manhood. I thought this item might be of interest worthy of your attention.

Yours sincerely,
John A. Corry, M.D.

Note: Since Dr. Arnold's twins arrived at night and Dr. Corry's in the daytime, I guess we will have to crown Arnold as "night champion," and Corry the "day champion." Does any other district have an entry?—Editor.

Atlanta, Ga.
June 12, 1952

To the Editor:

To me, the Journal of the Medical Association of Georgia (May 1952) is the most interesting volume yet. One thing is the variety: clinical, scientific, historical, and even Dr. Tift's article on the tonsil man who wouldn't see the tonsil patient. It is a good magazine.

Sincerely,
Lester A. Brown, M.D.

BOOKS

REVIEWS

ELEMENTARY MEDICAL STATISTICS, by Donald Mainland, M.B., D.Sc., F.R.S.E., F.R.S.C., Professor of Medical Statistics, Division of Medical Statistics, Department of Preventive Medicine, New York University College of Medicine, Philadelphia, 1952. 327 pages and 4 separate charts. Price $5.00.

This impressive little book presents an easily comprehensible outline of basic statistics applied to the practical problems of clinical and experimental medicine. The material is organized so that no mathematical background is required beyond the most elementary arithmetic. A major portion of the book is devoted to an explanation of the basic philosophy of statistics, and especially, to illustrating the many ways in which the application of simple statistical methods increases the amount of information derived from clinical observations. It is clear, after reading this book, that no physician who is concerned with the evaluation of methods of treatment or with the prognosis of disease can afford to be ignorant of these principles.

One of the best features of the presentation is the repeated consideration of the objections to statistical methods which uninformed practitioners commonly hold. In these discussions, the limitations of the method are sharply underlined, and the pitfalls of each technique are emphasized.

What can the practical physician hope to gain from reading this book? First of all, he will come to recognize limitations of hunches and "clinical judgment." He will obtain some concept of the implications of "good luck" and "bad luck" in his clinical results. He will learn how to define the limits of such vagaries of fortune. He will understand better the meaning of "normal" as applied to patients or to laboratory values. He should derive a healthy skepticism about the accuracy of diagnostic procedures and an improved understanding of their limitations. If he is experimentally inclined, he will learn a little about simple experimental design, and will learn a good deal about testing the significance of his experimental results.

This book is not for the experienced experimenter, nor for the sophisticated statistician. Dr. Mainland has made no attempt to expound the complicated methods used in advanced research; but the doctor who reads and understands this book will be well equipped to proceed to the use of more advanced methods. Throughout the book, there are references to other publications where the reader may find more detailed exposition of advanced material. In this way, the book offers a guide path for the neophyte experimentalist, as well as a handbook for the clinician.

In view of the excellence of the book, it is, perhaps, unfortunate that it has been published between paper covers. A book of this sort is likely to see very hard wear, and it should be constructed to stand years of constant use. This is especially true of the graphs which are tucked into a flimsy pocket inside the back cover, where they are likely to be damaged or lost.

I believe that every physician and medical student needs to be informed about the principles Dr. Mainland expounds. Every medical student and physician will benefit by reading this monograph; and, more important, patients will receive better planned and more intelligent care if their physicians apply the simple principles they can learn from this volume.

—P. K. BONDY, M.D.

UNTOWARD REACTIONS OF CORTISONE AND ACTH, by Vincent J. Derbes, M.D., and Thomas E. Weiss, M.D., Springfield, Ill., Charles C. Thomas, Publisher, 1951.

It is difficult to criticize an anthology, but when all phases of a subject are thoroughly explored in such a work the relative emphasis of each phase may be compared with its considered importance in the reviewer's mind. The monograph presently under consideration has the virtue of being not merely a listing of statistics on the usually described toxic effects, but an effort at explanation, thus creating a greater understanding of these and related problems. The physiological basis is nicely handled, and emphasizes the fact that so-called "untoward" effects are merely the untoward manifestations of physiological effects normally to be expected, and that what may be favorable in one circumstance may be unfavorable in another.

Physiological rationality and clarity is achieved nicely by comparison of the effects of pregnancy on disease states such as asthma, arthritis, and polio, and also by generally comparing the effects to the known signs and symptoms of Cushing's syndrome. (It is noted here that all effects are not like those of the alarm reaction of Selye.) Thus heretofore unrecognized effects may be more quickly understood. Also arrangement of outlines at chapter headings increase this book's usefulness as a reference.

However, its very completeness creates its chief drawback, first, in that reporting in a monograph of something not well established may give it more credence than the evidence warrants. Secondly, undue emphasis may be given to a relatively minor point, as for instance, the changes in electrical activity of the brain as commented upon.

In common with most recent hormonal literature, and because of the nature of the beast, this thesis is long on chemistry and short on pathology as such.

Again effectively presented are the dangers of masking of effects of infections and possible delayed diagnosis, and also that especially to be feared are tuberculosis, influenza, hemolytic streptococcus, and meningococcus.

It has been said that the greatest benefit to be gained from the use of these hormones is in their help in the understanding of physiological processes. To this end several pointed questions are brought forth in this treatise, as for instance, the relation of the type of healing to the effectiveness of treatment, and the question of a possible chemical basis for psychic reactions.

In general this review widens the number and type of untoward reactions but decreases the fear of them. For example, diabetogenic side actions are shown to be not usually lasting or harmful, and the hypertensive effect to be not bad except in association with pre-existing kidney disease.

With such physiological background, treatment of untoward effects becomes reactive, and the only advice to be added is attention to details and routine preventive measures.

—Ellison R. Cook III, M.D.

BOOKS RECEIVED

The following books have been received and the courtesy of the publishers is gratefully acknowledged. Reviews of books that have particular interest to Georgia doctors will appear as space permits. Additional information in regard to all books received will be gladly furnished by this office.

Advances in Medicine and Surgery—From The Graduate School of Medicine of the University of Pennsylvania. 441 pages with 43 figures. Philadelphia & London: W. B. Saunders Company, 1952. Price $8.00.

A Textbook of Pharmacology—Principles and Application of Pharmacology to the Practice of Medicine: By William T. Salter, M.D., Professor of Pharmacology, Yale University School of Medicine. 1240 pages with 284 figures. Philadelphia and London: W. B. Saunders Company. 1952. Price $15.00.

Elementary Medical Statistics—The Principles of Quantitative Medicine: By Donald Mainland, M.B,. Ch.B., D.Sc., F.R.S.E., F.R.S.C., Professor of Medical Statistics, Division of Medical Statistics, the Department of Preventive Medicine, New York University College of Medicine. 327 pages with 23 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $5.00.

Office Endocrinology—By Robert B. Greenblatt, B.A., M.D., C.M., Professor of Endocrinology, Medical College of Georgia, Augusta. Fourth Edition. Cloth, $10.50. Pp. 561, with illustrations. Charles C. Thomas, Publisher, Springfield, Ill., 1952.

Diagnostic and Experimental Methods in Tuberculosis—By Henry Stuart Willis, M.A., M.D., F.A.C.P., Superintendent and Medical Director, North Carolina Sanatoria, McCain, North Carolina, and Martin Marc Cummings, M.D., F.C.C.P., Director, Tuberculosis Research Laboratory, Lawson Veterans Administration Hospital, Chamblee Georgia. Second edition. Cloth $10. Pp. 373, with 40 illustrations. Charles C. Thomas, Publisher, Springfield, Ill. 1952.

Toxemias of Pregnancy—By Dieckman. Second edition. (New!) Clears much of the confusion concerning classification of the toxemias of pregnancy which is in great part due to failure to appreciate the difference between normal and abnormal pregnancy. 710 pages, 85 illustrations (1 in color). Price $14.50. C. V. Mosby Company, St. Louis, Mo. 1952.

MISCELLANY

Two Tifton doctors presented an educational cancer control film for the women of Tifton and Tift County. Dr. Ella Andrews, as chairman of the Tift County unit of the American Cancer Society supervised plans for the film exhibiting and made the introductory remarks explaining the objectives of the society for cancer control.

Dr. Carl Pittman, Jr., concluded the program with an open forum, answering the audience's queries about cancer control.

Dr. L. C. Johnson, of Manchester, announced the opening of a branch office of Johnson's Clinic in Woodland.

Four of Fort Valley's practicing physicians, Drs. J. E. Haslam, A. Smoak Marshall, Dan Nathan and Frank Vinson have organized a Doctor's Exchange. The Exchange assures the services of a local physician in case of emergency.

In Savannah, The Medical Grievance Committee, headed by Dr. John Elliott, and the Physicians' Emergency, under Dr. Thomas Upson, have been in operation for six months.

Both committees have been lauded in the press. Initial fears that the services might be abused have proved groundless as the demand by the public for either service has been virtually non-existant.

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI AUGUST, 1952 NUMBER 8

Editorials

Chronically Ill 'OLDSTERS': *the Number One* MEDICAL PROBLEM

Medicine's number one problem today frequently is declared to be chronic disease in an aging population. Furthermore, it is generally agreed that this problem has been medically created and perforce must be solved by the medical profession.

That good medicine has resulted in such an anomaly is not difficult to understand when one considers that with it has come the use of liver extract, insulin, x-ray techniques, vitamins, penicillin, cortisone, ACTH, and cardiac surgery . . . everything, in fact, that has gone into making medical care in America what it is today.

It has been pointed out that 2,000 years ago, man's expectancy was 25. By 1900, 49. Today, age expectancy has reached 71 for white women and 65½ for white men in the United States.

A white man of 65 today has an expectancy of 12 years and a white woman of almost 14.5 years.

Dr. Howard A. Rusk, professor and chairman of New York University-Bellevue Medical Center's Department of Physical Medicine and Rehabilitation, recently indicated that 25 per cent of the population in America in 1940 was beyond the age of 45. It required 50 per cent of the medical service. By 1980, almost 50 per cent of the population will be beyond 45 and will require 80 per cent of the medical service.

Veteran figures also are important in considering the problem. At the end of World War II, there were three million, four hundred thousand veterans from World War I still alive and their average age was 53. By 2000 A.D., there will be three million, seven hundred thousand veterans from World War II alive, with average ages of 78.

Admittedly, this problem is not only one for solu-

tion by the American medical profession. It is a primary problem in our very economy.

Dr. Rusk ventures to predict that should American business fail to do something about retirement at 65, on the chronological rather than the physiological age, and do nothing to increase utilization of the chronically ill within their capacity by 1980 there will be one chronically ill person for every able-bodied worker in America, an outright tax burden on that worker.

From whence came the year "65"? Dr. Rusk amusingly observes that it probably emanated from a symposium of physiologists who came to a conclusion that this was the retirement age. Or, on the other hand, he states, it was decided upon by some board of directors meeting one day when the President (a crochety old 65-year-old) was out of town which came up with a solution to its problem by requiring compulsory retirement at 65.

While chronic illness certainly does not offer the challenge to the medical profession that acute medical problems do, doctors must accept a sizable portion of the responsibility because they have helped to create the situation.

PUBLIC RELATIONS *Is* NOT *a* PUBLIC FIGHT

At the recent Georgia Convention in Savannah, Dr. David Henry Poer, Secretary of the Medical Association of Georgia, drew an analogy between the prescribing druggist and a dispensing medical practitioner.

In the course of his talk, he made two potent suggestions: (1) that liaison committees be set up between druggists and physicians in each community and, (2) that druggists in their advertisements post the names, addresses and telephone numbers of medical practitioners—even to the dentists and veterinarians.

On his return home from Douglas, T. S. (Tom) Deen immediately commenced newspaper advertising showing the names of the medical practitioners, dentists and veterinarians.

The principal reason for doing this is because we are having a change in residential population, and also because itinerants often need attention while stopping in a town during the course of their travels.

What Mr. Deen did was typical of the aggressive Pharmacist, who is in earnest about solving the professional relations friction between the two branches of medical services. What he actually accomplished was a master feat of both professional relations and public relations. If all drug store owners in the Southeastern states followed the touchy subject, which constitutes a sore both on the fraternity of doctors and that of pharmacists.

In another move to establish better public relations, the public relations committee of the Georgia Pharmaceutical Association held a meeting on Thursday, July 19, in Atlanta, for the purpose of setting up a systematic advertising program and to designate "Georgia Pharmaceutical Week."

Chairman Jesse Goldman, manager of Rich's Pharmacy, established the objectives of the committee in a very masterful manner.

"The public," he said, "is interested in what you are doing for the public and not for yourselves. No public relations committee can relieve itself of every member's individual responsibility. The drug store itself is the public face of the profession. Not

Reprinted through the courtesy of the *Southeastern Drug Journal*, July, 1952.

only the prescription department but the entire store must express integrity, decency, and cleanliness.

"They can satisfy many community needs and maintain respect for Pharmacy, if he always remembers he is doing business in the name of Pharmacy, and must share its responsibility as well as its privileges."

Mr. Goldman made a terrific statement when he said that the loss of Fair Trade would hit the drug store far less than the loss of public favor. Here are a few things the chairman related that the general public is saying about drug stores and the pharmaceutical profession.

1. House-to-house sales girls know more about cosmetics.
2. Fair Trade laws create higher prices.
3. Drug store fountains create loafers.
4. You have to be careful where you take your prescriptions.
5. Prescription prices differ with every store.
6. Drug stores today sell everything but drugs.
7. Mail order houses have much lower prices.
8. Why don't doctors and drugists cooperate?
9. Modern drugs cost too much.
10. Almost anybody can fill prescriptions today.
11. It is easier to shop in super markets.
12. Why pay a fee to pharmacists for putting his label on bottles.
13. Other types of stores are cleaner and more attractive.

Southeastern Drug Journal takes this means of extending its congratulations not only to Mr. Goldman, but to the entire membership of the G. P. A. public relations committee for getting down to brass tacks and determining to do something about the situation. The management also wishes to commend Tom Deen for his alertness. While both instances are somewhat apart in design, they reflect the same good intention of improving the status of Pharmacy in Georgia.

—Jack Bates

R_X *for*

YOUR JOURNAL

Every month a brand new copy of the *Journal of The Medical Association of Georgia* is delivered to you. This magazine is your Association's publication. It is your magazine. And it should bring you the type articles, news and information you seek. It should be "tailored" to be the magazine you want.

A prescription for the type journal you want will be filled by your editor and his staff But you must prescribe the ingredients. In short, the effectiveness of your journal depends on its contents. It is your papers, scientific research and investigations that determine the quality of the publication. It is your editorials, special articles, book reviews, etc., that can make the Georgia journal outstanding.

In attempting to publish a topflight magazine, the editors must have a constant flow of material from the contributors. And this material must be the best efforts of the Georgia doctors. The editor can display this material to the best advantage and circulate this material, but in any analysis, it is the material itself that "makes" the magazine.

We have seen some journals that are very attractive typographically, yet they fall short in the quality of content. And we have seen journals that are styled in a typography suitable to the "Model T" era, but are still outstanding because of the excellent content of the material they carry.

Certainly there is a happy medium between the extremes of display and quality of content. The editor of your journal is striving to obtain the best material and display it so that it will be attractive and readable. But it rests with you to give the editor the material that will make the *Journal of The Medical Association of Georgia* a leader in the field of medical journals.

Before filing the prescription for your journal, consider the little items that can improve it. Does your local society send the editor a resume of its monthly meetings? Do you send the editor medical news of your community, personal items, announcements, etc.? And finally, do you send the editor your own critical comments concerning the journal itself? Sincere suggestions from the doctors of Georgia will give the doctors of Georgia the kind of a magazine they want every month.

The next article in this series will concern the actual production operation involved in editing your journal, tracing the various step-by-step processes from the manuscript to the finished product.

Scientific Articles

CARCINOMA *of the* CERVIX-- *Results of* RADIATION THERAPY

THOMAS HARROLD, M.D., and

J. BENHAM STEWART, M.D., Macon

In 1919, shortly after his return from World War I, the late Dr. Charles C. Harrold of Macon became interested in the treatment of malignant disease by radiation and acquired one of the first supplies of radium in the South to be used for this purpose. From then until his death in 1948 he maintained a continued interest in this field of cancer therapy and treated a large number of patients with malignant disease. He, along with Drs. Campbell of Atlanta, Bernard of Augusta and Callaway of LaGrange, was a real pioneer in this field of work in Georgia and undoubtedly contributed more to its establishment on a firm foundation than any other men of their time. Many thousands of Georgians received the benefits of treatment directly from these men and many more thousands will benefit indirectly through the students and associates trained by these pioneers in the field of cancer therapy.

In view of the present discussion of the surgical treatment of carcinoma of the cervix, we felt that it would be of interest to determine what our results have been with a fairly standardized method of treatment by radiation. We, therefore, selected the entire group of patients with carcinoma of the cervix treated by Doctors C. C. Harrold and the senior author between the years, 1931 and 1945. This particular period was chosen because at that time a 200,000 kilovolt x-ray machine was acquired and since that time our treatment has been fairly uniform. Another reason for choosing this period was that during this time surgery was not considered in any patient as a method of treatment. Since then the problem of surgery has arisen, although it has been used on very infrequent occasions. The maximum period of follow-up is approximately 19 years and the minimum six years. It has proved quite difficult to locate many of these patients in spite of a considerable degree of cooperation by the Public Health nurses in the counties surrounding Macon and the help of the doctors who originally referred the patients for treatment. It is to be noted that the period covered in this study includes the entire World War II period when, as all of us know, there was considerable shifting of population. In spite of our best efforts we have been unable to locate some of the patients treated during this time. In examining the records of these lost patients most of them were in advanced stages and it is likely that most of them died of disease. However, there were a few early and apparently favorable cases but inasmuch as we are unable to determine the final outcome in these cases for purposes of statistics, all will be considered as having died of disease. Whenever possible, we have examined the patients reported as living and well but in some instances we have been unable to have them return to the office or Clinic for examination. In these instances we have accepted the statement of the patient or of the local doctor that the patient was living and in good health. It is unlikely that this has resulted in any great error in the report.

Read before the Section on Surgery at the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 13, 1952.

General Plan of Treatment

Radium has been applied to the cervix as the first or primary treatment for the following reasons:

(1) It was felt that the local disease could be brought under control more quickly with direct application of radium than with external radiation.
(2) Bleeding can be more quickly controlled with radium than with external radiation.
(3) Many patients live at a distance from Macon and, if given x-ray therapy first, would require prolonged hospitalization for treatment; whereas, radium can be applied with a very short hospital stay.
(4) Following control of hemorrhage and appropriate therapy directed toward the existing anemia, most patients improve generally to such an extent that they can stay in boarding houses or with relatives in Macon and take x-ray therapy as out patients after an interval of a few weeks.

We realize that much can be said for an alternate plan giving the x-ray therapy first. We are aware of the fact that much of the infection in the cervix, so frequently present when carcinomatous lesion exists, will improve under x-ray therapy but in spite of this advantage we have felt that on the whole, radium therapy given first was more practical. We have no recorded incidence of fatal peritonitis following the use of radium in the cervix as a primary treatment, although a number of these patients did have a febrile course for some days, or even weeks, following the radium. In recent years antibiotics have taken care of this undesirable complication of radium therapy quite satisfactorily.

Our basic treatment has consisted of approximately 2500 milligram hours of radium given, either in a catheter, or more often in a metal Clarke container, which is T-shaped and contains radium in the long arm inside the cervical canal and a tube of radium crosswise at the external os. In occasional bulky growths this has been supplemented by the implantation of radium needles around the periphery of the large growth. After an interval of three to six weeks, a second dose of radium is routinely given in a double colpostat in which the radium is located in two rubber cylinders packed into each fornix of the vagina for an additional 2500 milligram hours. When this method of application has not been technically feasible, a radium bomb made of lead and with radium on the surface of it has been applied to the surface of the cervix, or, in a few instances, a radium plaque made of cloth with radium tubes sutured to it have been packed against the surface of the cervix. Needless to say, minor variations of this technique have been necessary to fit the individual patient, but the dosage of radium has always been between 4,000 and 6,000 milligram hours, and usually delivered in two treatments.

A month after the second dose of radium a cycle of x-ray therapy is begun. This treatment has been administered with a 200,000 volt machine and .5 of a millimeter of copper and one millimeter of aluminum used as a filter. As a rule, 1800 to 2000 R units of x-ray are delivered through each of two anterior and two posterior ports 15 x 15 centimeters in diameter. Occasionally in obese women, two additional lateral ports are given and the distance increased from 50 to 70 centimeters in an effort to obtain maximum depth dosage. This cycle of treatments usually requires approximately three weeks for completion, and a good erythema of the skin is obtained. With the dosage outlined above we have had a moderate amount of trouble with irritation of the bladder and rectum from the x-ray and it has seemed to us that with our equipment and spacing of dosage the quantities indicated above are as much as is practical for us to give our patients without undue complications. When we refer to complete treatment, we will mean a dose of from 4,000 to 6,000 milligram hours of radium supplemented by 6,000 to 8,000 R of x-ray.

Through the years it was our experience that if a cycle of treatment, such as that described above, did not produce a cure in the patient, additional radiation would also be unsuccessful and in a large percentage of cases would produce sloughs and other unpleasant complications which only serve to make the patient more miserable. Heroic attempts at salvage of patients having recurrent cancer by giving additional full cycles or heavy single doses of radiation were usually disastrous. Therefore, having completed one round of treatment, additional radiation was rarely given except on a purely palliative basis and in relatively small doses. Occasionally, considerable relief could be obtained if the dosage were kept small. As with surgery, so with radiation, in the treatment of cancer one's first effort toward a cure is generally the last real chance that the patient has. Therefore the patient should be individualized and given every possible benefit of careful treatment in the first cycle of therapy.

Survey of Literature

It is beyond the scope of this paper to attempt a complete survey of the voluminous literature on the subject of carcinoma of the cervix. In 1950 Cantril[5] published an excellent monograph on the subject and those interested in such a complete review are urged to consult this book.

In a table in this book, the author summarizes the five year survival rates from 18 of the largest and best known clinics in the world and these vary from a low of 26.7 per cent to a high of 44.4 per cent. The average for all the 18 clinics was 34 per cent. It is noted that the clinics reporting the best results also had as high as 65 per cent of their patients in Groups I and II, whereas, those reporting the lowest percentages had only about 40 per cent in Groups I and II. It is well known that most of the cures obtained are in Groups I and II. However, this should not affect the general average and the 34 per cent would seem to be a fair yardstick by which to gauge one's own results. In our own series approximately 45 per cent of the cases fell in Groups I and II and 55 per cent in Groups

III and IV. Therefore, we feel that our absolute survival rate of 30 per cent is quite in line with statistics reported in the world literature.

Garcia[8] reporting from New Orleans shows results that are comparable with this series. He reports absolute five year survival of 27 per cent among the Negro patients and 34 per cent among the white patients. This gives an absolute survival rate for the entire group, whites and Negroes, of 29.4 per cent. We did not do as well with the Negroes, obtaining only 22.01 per cent absolute survival, but in the white group our absolute survival rate was 33.5 per cent. We had more whites than Negroes and our average worked out to almost the same figure of 30 per cent absolute five year survival.

Ward[20] reporting from the Woman's Hospital in New York shows 32.2 per cent five year survival and Fricke[7] of the Mayo Clinic reports 32.8 per cent five-year survival. A report from Memorial Hospital[16] shows 28.7 per cent five year survival. The Swedish Hospital in Seattle[5] and the Radium Center in Copenhagen[5] both report 44 per cent five year survival and both of these hospitals had a high incidence of early cases which would tend to improve their statistics.

For comparison it might be asked—what has surgery to offer? As a matter of fact, no suitable reports of large groups of cases are as yet available for comparison with the figures quoted above. In general, it may be stated that through the years only 50 per cent of women presenting themselves for treatment have been considered operable by the surgeons who saw them. Of the 50 per cent of the total which were operated upon, approximately 50 per cent have lived five years. This means that there was an absolute salvage of 25 per cent of the entire group of patients. This type of radical surgery also carried with it an operative mortality of 15 to 25 per cent. There is every reason to believe that these same surgeons operating today with the benefits of antibiotics and ample blood transfusions would have a mortality of something less than 5 per cent. Bonney[2] of London persisted with the surgical treatment of carcinoma of the cervix over a period of more than 30 years and his published results are at present the most comprehensive ones available. His operability rate was approximately 50 per cent. His surgical mortality was 14 per cent. It is presumed that he operated almost entirely on Group I and Group II patients. His absolute five year survival rate in a continuous series of 500 operations was 40 per cent. Our five year survival rate in the patients in the same groups treated entirely with radiation was 48.6 per cent with no primary mortality. Operating under modern conditions with a presumed mortality of less than 5 per cent, it is entirely likely that his absolute survival rate would have approximated the 48.6 per cent which we report. So it would appear that, based on Bonney's work, there would be little, if any, difference in the final results obtained. It may be that his ten year results are better than ours and this is an important point. Unfortunately, we were not able to calculate our absolute survival for ten years in the Groups I and II patients. Bonney found that when the pelvic glands were involved only 22 per cent survived five years, whereas, when the glands were not involved at the time of operation, 53 per cent survived five years.

Fricke[7] reporting from Mayo Clinic states that 11 per cent of 3,800 cases were treated surgically in that Clinic with a 29 per cent five year survival; whereas, during the same period of time a similar group of patients treated by radiation showed 32.8 per cent survival. In a group of 88 selected surgical cases Morton[15] reports five year survival of 64.7 per cent as compared with 50 per cent in Groups I and II treated radiologically in the same clinic. It is difficult to know whether or not these two groups of cases are actually comparable as the surgical cases are necessarily selected patients. Meigs[11,12] and a few other skilled surgeons are at present undertaking to determine just what can be accomplished by primary surgery in the Group I and Group II patients. He reports his five year results in 85 carefully selected patients treated surgically. All were thin young women with early disease and were excellent surgical risks. There was no surgical mortality but eight developed ureteral fistulae. In Stage I, 80.7 per cent survived five years or longer and in Stage II, 60.7 per cent survived five years or longer. For the group as a whole the survival rate was 74.1 per cent. Lymph node involvement was found in 22.4 per cent of cases and only 26.3 per cent of these survived five years. This report is most striking and deserves careful consideration. It remains to be seen whether either the safety or the excellent results reported by Meigs can be duplicated by less skillful surgeons. His strict selection of cases also limits its applicability to a small percentage of the total number of women with carcinoma of the cervix. In summary, I think it may fairly be stated that at the present time the primary surgical tretament of carcinoma of the cervix has not yet been shown to be the equal or the superior of radiation therapy in the early cases, and is certainly not applicable to the more advanced cases. Meigs[14] states ". . . while the possibilities of surgery are being re-explored, the value of radiation has been proved and this should be the treatment of cancer of the cervix except in institutions equipped for investigative radical surgery."

The possibility of using a combination of radiation therapy and surgery remains to be considered. We have had ample experience in the past in attempting to treat surgical failures by radiation with almost completely disastrous results. The reverse procedure of attempting to use surgery following radiation failures or in conjunction with radiation as a selective procedure is being carefully investigated in several clinics at the present time. One group of investigators is deliberately using radiation followed by radical surgery. The second group is attempting to use surgical treatment in those cases which prove to be radio-resistant after a fair trial

with radiation. The third group is attempting quite radical surgery when recurrence takes place some time after radiation. Certainly additional radiation has very little to offer these patients and it remains to be seen what, if anything, surgery has to offer. Certainly, surgery of this type is much more difficult to perform than primary surgery and the complications and mortality may be expected to be considerably higher. However, those who have had experience with surgery talk in terms of five or 10 per cent salvage. Whether or not this small return will be worth all of the effort in time, money, morbidity and shortened life span for the large number of patients in whom it is unsuccessful remains to be seen. Surely it is not to be undertaken lightly nor except by the most experienced surgeons and with the best of equipment.

Final surgical approach is that of an attempt to treat advanced cases by the most radical pelvic exenterations that it is possible for a patient to stand. This frequently involves the removal of the bladder and/or the rectum along with the uterus and a complete dissection of all pelvic nodes. Even in the best of hands, the mortality for this type of operation is still quite high and the salvage in terms of long-time survival is quite low. Those experienced with its use maintain that, even though cure is rarely obtained, there is remarkable relief of local pain which is so often distressing in the terminal stages of non-surgically treated patients. These heroic surgical efforts remain to be evaluated in the light of accumulated experience.

The use of vaginal smears and repeated biopsies following radiation may be a most useful adjunct in selecting cases which are not responding satisfactorily to such therapy and this method is advocated by Graham[9]. It should provide us with some guide or means of selecting the patients who might be salvaged by surgery.

Most people feel that the crux of the whole problem lies mainly in the involvement of pelvic lymph nodes. It is fairly generally agreed that no presently available methods of radiation can deal effectively with pelvic lymph nodes located at a distance from the cervix. It is thought by many that the only patients who are cured by present methods of radiation are those in whom the disease is confined to the cervix or in which the disease extends no more than a distance of one or two centimeters from the cervix in the broad ligaments. If this is true, surgery should offer some additional salvage above that obtained by radiation in the relatively early cases. However, Morton[15] reports that, in a group of patients who were first given radiation and then operated upon, only 11 per cent of the pelvic lymph glands showed cancer; whereas, in a similar group of patients operated upon without pre-operative radiation 35 per cent showed involved lymph glands. This would indicate that radiation had been effective in a fairly high percentage of cases with involved lymph nodes, although it did fail in 11 per cent. The problem, therefore, lies in our inability to determine by physical examination which cases have involved lymph nodes and also in our inability at the operating table to be sure that we have removed every involved lymph node. It is unfortunately true that the lower ends of the ureters lie in the exact field where spread of the disease is most likely to occur. This is the true obstacle to definitive pelvic surgery and any operation that fails to sacrifice the ureters is, therefore, necessarily a compromise.

Statistical Study

As stated above, this present material consists of both private and Clinic patients and represents all those treated between 1931 and 1945, inclusive.

TABLE I.

Follow-Up Data Entire Group of Cases Studied

	White	%	Negro	%	Total	%
Total cases 1931-1945	261	55	209	45	470	100
Followed 5 years or to death	231	88.5	190	90.9	421	89.6
Lost to follow-up in less than 5 years	30	11.5	19	10.0	49	10.4

Table I shows that there were 470 instances of carcinoma of the cervix for study of which 421 were satisfactorily followed, either to death or for a minimum period of five years. Thus we know the results of treatment in approximately 90 per cent of all our patients. It will also be noted that approximately 55 per cent of our patients were white and 45 per cent Negro. The percentage of successful follow-up was practically the same in both of these groups.

TABLE II.

Five Year Absolute Survival

	White	%	Negro	%	Total	%
Total cases 1931-1945	261	55	209	45	470	100
Known to have survived 5 years or longer	94	32.2	46	22.01	140	30.0

Table II shows our absolute five year survival rate in which all lost patients are considered as dead. This table is the most important one of the study. Out of the entire group of 470 cases, 140 patients are definitely known to have survived five years or longer. This gives us an absolute five year survival rate of 30 per cent. When the two races are divided, it is seen that the five year survival rate is definitely better in the group of white patients than in the group of Negro patients. As will be shown in a later table, a larger number of white patients were in Groups I and II.

TABLE III.

TEN YEAR ABSOLUTE SURVIVAL

	White	%	Negro	%	Total	%
Total cases 1931-1941	170		97		267	
Known to live 10 years	47	27.6	11	11.3	58	21.7

In Table III the absolute ten year survival rate of all cases seen between 1931 and 1941 is shown. It is noted that 21.7 per cent of all patients treated in this ten year interval survived ten years or longer. There is a rather striking difference in the survival rate of whites and Negroes. The explanation of this is not apparent. It is realized that many patients die in this intervening five year period of diseases other than cancer of the cervix. We have a number of such individual case reports but we did not feel that our follow-up data was sufficiently accurate to justify us in making a subtraction of these patients who died of intercurrent disease. Therefore, both figures of 30 per cent five year survival and 21.7 per cent ten year survival are absolute figures.

TABLE IV

SURVIVAL IN GROUP OF FOLLOWED CASES

	White	%	Negro	%	Total	%
Total followed cases 1931-1945	231		190		421	
Known to have survived 5 years or longer	94	40.7	45	23.7	139	33.0
Total cases followed 1931-1941	136		85		221	
Known to have survived 10 years or longer	47	34.5	11	12.9	58	21.0

Table IV is practically the same as Tables II and III, except that in this table only those patients are considered who were actually followed and in which the final result is known. In this group we have 421 patients with an absolute five year survival rate of 33 per cent. The absolute ten year survival rate is 21 per cent which is practically the same as for the group as a whole. One factor which greatly influences all survival rates is the stage of the disease when first seen.

TABLE V

STAGE DISTRIBUTION FOR ENTIRE GROUP

Stage	I	II	III	IV	Total
Number of patients	69	141	160	100	470
Incidence per cent	14.7	30.0	34.1	21.2	100
Absolute 5 year survival	46	56	33	5	140
Survival per cent in each group	66.6	39.7	20.6	5.0	30
Survival per cent in Groups I and II	48.6				

Table V shows the distribution of these 470 patients, according to the Schmidt classification at the time of first examination. Just to refresh your memory, in this classification, Group I comprises only those patients who have a small lesion of not more than one centimeter in size in the cervix. Group II comprises extensive lesions of the cervix but with no perceptible extension beyond the cervix at any point. Group III comprises more extensive lesions with involvement of the vagina or the parametrium on one or both sides, but without fixation. Group IV included all of the more advanced lesions with fixation of the vaginal vault and cervix and extension to the pelvic wall, or to the bladder or erctum. Just as would be expected, you will note that most of the five year survivals occur in Groups I and II. Attention is directed to the absolute survival rate of 66.6 per cent in the Group I cases. This is the figure that should be used for comparison with the results of surgery. Or, if one wishes to consider Group II cases in the operable class, then the absolute survival rate for Group I and Group II is 48.5 per cent. You will recall that Bonney's[2] five year survival figure in surgically treated cases was 40 per cent.

TABLE VI

STAGE DISTRIBUTION IN PRIMARY CASES WITH FIVE YEAR SURVIVAL

Stage—White:	I	II	III	IV	Total
Number of patients	51	92	79	39	261
Incidence per cent	19.54	35.25	30.27	14.94	
Absolute 5 year survival	36	38	16	4	94
5 year survival per cent	70.60	41.30	20.25	10.30	33.5
Total Groups I and II	51.05%				

Stage—Negro:	I	II	III	IV	Total
Number of patients	18	49	81	61	209
Incidence per cent	8.61	23.44	38.75	29.18	
Absolute 5 year survival	10	18	16	1	45
5 year survival per cent	55.5	36.7	19.75	1.63	21.53
Total Groups I and II	44.67%				

	Group I	Group II
Combined survival total white and Negro	66.66%	39.8%
5 year survival Groups I and II white and Negro	48.6%	

Table VI is a further breakdown of the distribution of the cases by stage of disease and by race. The chief point of interest in this table is that only approximtaely 32 per cent of the Negro patients fell in Groups I and II, whereas, 55 per cent of the white cases were in these early groups. In large measure this accounts for the great difference in survival rate between the two races as a whole. However, when only Groups I and II cases which were completely treated are considered, there is still a striking difference in survival rate between the two races. The reason for this is not apparent.

TABLE VII

COMPLETENESS OF TREATMENT ENTIRE GROUP

	Number of white and colored	Incidence per cent	Number of 5 year survivals	Absolute 5 year survival per cent	Number in 10 year group	Incidence per cent	Number of 10 year survivals	Absolute 10 year survival per cent
No treatment	18	3.90	0	0	10	3.75	0	0
Incomplete treatment	71	15.10	8	11.26	44	16.48	4	10.00
Palliative treatment only	24	5.10	0	0	15	5.61	0	0
Complete treatment radium and x-ray	357	76.00	131	36.69	198	74.16	54	27.27
Total	470	100.00	139	30.00	267	100.00	58	21.70

Another important factor affecting the survival rate of patients is the completeness of the treatment given. In Table VII you will note that 9 per cent of the patients either received no treatment at all or were given only palliative treatment. Of course, there were no survivals in this group. Fifteen per cent of the patients received incomplete treatment. This means that they failed to return for the complete cycle of treatment offered, or, in a few instances, extremely early cases were given radium only. This accounts for the few survivors that appear in this group. The absolute five year survival rate for those patients receiving complete radium and x-ray treatment was 36.69 per cent and the ten year absolute survival rate was 27.27 per cent.

TABLE VIII

COMPLETENESS OF TREATMENT

White	Number in 5 year group	Survived 5 years	Incidence per cent	5 year survival per cent	Number in 10 year group	Survived 10 years	Incidence per cent	10 year survival per cent
No treatment	7	0	2.69	0	5	0	2.95	0
Incomplete treatment	21	3	8.04	14.29	15	1	8.87	6.66
Palliative treatment only	9	0	3.45	0	5	0	2.95	0
Complete treatment radium and x-ray	224	91	85.82	41.08	144	46	85.23	31.25
Total	261	94	100.00	33.00	169	47	100.00	27.81

Tables VIII and VIII (A) separate into races the material contained in Table VII.

TABLE VIIIA

COMPLETENESS OF TREATMENT

Negro	Number in 5 year group	Survived 5 years	Incidence per cent	5 year survival per cent	Number in 10 year group	Survived 10 years	Incidence per cent	10 year survival per cent
No treatment	11	0	5.27	0	5	0	5.10	0
Incomplete treatment	50	5	23.92	10.00	29	3	29.59	10.35
Palliative treatment only	15	0	7.18	0	10	0	10.20	0
Complete treatment radium and x-ray	133	40	63.16	30.00	54	8	55.11	14.81
Total	209	45	100.00	21.5	98	11	100.00	11.22

TABLE IX

SURVIVAL IN GROUP WITH COMPLETE FOLLOW-UP AND COMPLETE TREATMENT

	White	%	Negro	%	Total	%
Total cases with complete follow-up and complete treatment 1931-1945	205		125		330	
Known to have survived 5 years or longer	91		40		131	
5 year survival per cent		44		32		40
Total cases with complete follow-up and complete treatment 1931-1941	122		48		170	
Known to have survived 10 years or longer	46		8		54	
10 year survival per cent		37.7		16.6		31.8

Table IX comprises our best group of results, namely, that group in whom complete treatment was given and which was completely followed for a minimum of five years. It is to be understood that the lost patients and those who received incomplete or palliative treatment only are excluded from this group. As it is definitely a selected group, it may well be argued that it is of limited statistical importance. However, we feel that it represents the optimum goal for which we may strive. If we could see all of our patients

in an early stage to warrant complete treatment and at the same time have their complete cooperation in taking this treatment and in returning for follow-up examinations, I am sure that our overall percentages would approach those shown in this table. These are not all cancers in an early stage. A number of them are in Groups III and IV but we felt that they should be given the benefit of complete treatment. Attention is directed to the five year survival rate of 40 per cent and the ten year survival rate of 31.8 per cent in this selected group of patients.

We were surprised to find that only six cases of carcinoma originating in the cervical stump were recorded in this series. Two of these survived five years and one survived ten years. It is our impression that we have seen a greater incidence of stump cases in the past five years than are recorded in this series. Of the patients reported living five years after treatment was begun, it is known that 11 had some evidence of disease at the end of the five year period. Of those known to be living ten years or longer after first treatment, three are known to have had disease at the time of report.

Although only 45 per cent of all patients were in Groups I and II, 73 per cent of all five year survivals were in this group. Conversely, 55 per cent of all patients were in Groups III and IV but only 27 per cent of the five year survivals were in this combined group.

The major complications of radiation therapy may be divided into the following groups:

1. Peritonitis.
2. The development of rectovaginal or vesicovaginal fistula.
3. Pyometra.
4. The development of extensive radiation slough.
5. Ureteral obstruction, hydronephrosis and pyelitis.

In regard to peritonitis, although this is a definitely recognized danger, we have not had a fatality from this cause. No doubt in some instances we have had a localized pelvic peritonitis which has been satisfactorily controlled by appropriate treatment.

We have had several rectovaginal and vesicovaginal fistulae develop. In the vast majority of these patients active carcinoma has eventually manifested itself either in or near the fistulous tract. These naturally occur in the more advanced conditions. However, we have had three or four rectovaginal fistulae which were apparently the result of radiation necrosis and technical error in treatment. In spite of our best efforts and precautions to avoid this, occasionally the radium becomes displaced and becomes located outside of the lead shield which is placed between the radium and the rectum with a resulting radium burn on the posterior vaginal wall and development of a fistula. We have found that the best method of handling these conditions is by creation of a permanent colostomy. Surgical repair of the fistulae is most impossible due to the large amount of fibrosis and radiation reaction in the tissues surrounding the fistula. We have never observed a vesicovaginal fistula in a patient except those in whom there was active disease. We have had no ureteral fistula to develop.

Pyometra probably occurs in 5 per cent of the cases treated. Radium given in the cervical canal produces fibrosis and blockage of the cervix with resulting accumulation of blood or pus in the fundus. This is usually treated satisfactorily by repeated dilatation of the cervix and frequent use of the gold spring pessary to provide adequate drainage.

Extensive slough in the cervix and surrounding tissues usually indicates overdosage with radiation. However, occasionally such slough develops with what seems to be a very moderate or even small dosage. This is extremely difficult to treat and is a complication to be avoided whenever possible.

It is well known that an appreciatble percentage of patients develop varying degrees of hydronephrosis of one or both ureters whether treated surgically or by radiation. This is due to stenosis of the lower end of the ureter caused by fibrosis incident to treatment or, in the unsuccessful cases, to recurrence or extension of disease. The immediate cause of death in many of the fatal cases is uremia. Appropriate attention to those cases due to fibrosis rather than active cancer, is strongly indicated.

Summary

We have reported the five and ten year results of treatment of 470 cases of patients with carcinoma of the cervix with radium and x-ray. Our absolute five year survival rate was 30 per cent. Our absolute five year survival rate in Groups I and II was 48.6 per cent. It has not yet been demonstrated that the surgical treatment of carcinoma of the cervix produces as good or better results than these reported. We therefore feel that at the present time radiation is the better method of treatment and that surgery should be reserved for a very small number of carefully selected patients.

NOTE:

Mrs. Willie E. Folds, Mrs. Eunice Goodloe and Miss Martha Horne were of great assistance in tracing the patients in this study and we wish to express our thanks to them.

BIBLIOGRAPHY

1. Ball, John W., et al. Carcinoma of the Cervix. New England J. Med. 245: 684-688 (Nov. 1) 1951.
2. Bonney, Victor. Wertheim's Operation in Retrospect. The Lancet 637 (April 16) 1949.
3. Bowing, Harry H., & Fricke, Robert E. Cancer of the Uterus. Am. J. Roentgenol. 49: 487-493 (April) 1943.
4. Bowing, Harry H., & Fricke, Robert E. Late Results of Radium Therapy for Carcinoma of the Uterine Cervix. J.A.M.A. 137: 935-941 (July 10) 1948.
5. Cantril, Simeon T. Radiation Therapy in Carcinoma of the Cervix. Monograph, American Lecture Series, Pub. Charles C. Thomas, 1950.
6. Costolow, William E. Carcinoma of the Cervical Stump. Am. J. Roentgenology. 52: 41-62 (Jan.) 1949.
7. Fricke, Robert E. Selection of Therapy for Carcinoma of the Cervix. Ann. West. Med. & Surg., 3: 410-412 (Dec.) 1949.
8. Garcia, Manuel. Carcinoma of the Cervix in the Negro. Sou. Med. Journal. 45: 145 (Feb.) 1952.
9. Graham, Ruth M. The Effect of Radiation on Vaginal Cells in Cervical Carcinoma. Surg., Gynec. & Obst. 84: 153-165 (Feb.) 1947.

10. Kaplan, Henry S., et al. Results and Causes of Failure of Radiation Therapy in Carcinoma of the Cervix. Surg., Gynec. & Obst. 86: 332-340 (March) 1948.

11. Meigs, Joe Vincent. Carcinoma of the Cervix. Surg., Gynec. & Obst. 78: 195-199 (Feb.) 1944.

12. Meigs, Joe Vincent. The Radical Operation for Cancer of the Cervix. Am. J. Roentgenol. 57: 679-684 (June) 1947.

13. Meigs, Joe Vincent. Results of Surgical Treatment in Carcinoma of the Cervix. Am. J. Obst. and Gynec. 62, 854 (Oct.) 1951.

14. Morris, J. L. and Meigs, J. V. Carcinoma of Cervix, S. G. & O. 90: 135-150 (Feb.) 1950.

15. Morton, Daniel G. (Wertheim Operation; Pelvic Lymphadenectomy. Am. J. Roentgenol. 57: 685-696 (June) 1947.

16. Munnell, Equinn W. & Brunschwig, Alexander. Five Year End-results of Radiation Therapy of Cancer of the Cervix Uteri at the Memorial Hospital. Surg., Gynec. & Obst. 87: 343-348 (Sept.) 1948.

17. O'Brien, Frederick W. Cancer of the Cervix. Am. J. Roentgenology & Radium Therapy. 57: 281-296 (March) 1947.

18. Parsons, Langdon. Cancer of the Cervix, Observation on the Effect of X-ray Therapy on Regional Nodes. S. Clin. No. Amer. (Oct.) 1947.

19. Schmitz, Herbert E. The Treatment of Cervix Carcinoma with X-ray and Radium. Proceedings of Third American Congress on Obstetrics and Gynecology. pp. 205-207. 1947.

20. Schmitz, Herbert E. The Treatment of Cervix Carcinoma with Radium and 800 kilovolt X-ray. Am. J. Obst. & Gynec. 55: 262-272 (Feb.) 1948.

21. Schmitz, Herbert E. The Management of Carcinoma of the Cervix, with Emphasis on the Controversial Factors in the Treatment. Surg. Clin. No. Amer. 30: 249-257 (Feb.) 1950.

Certain PROBLEMS *in* FRACTURE TREATMENT

H. EARLE CONWELL, M.D., Birmingham

The necessity for improved fracture treatment has been demanded in the last few years by the increasing number of fractures and their disabilities resulting from industry, automobiles, aeroplanes, and other technological changes. Even though many safety-first methods and precautions have been introduced to lower the incidence of accidents, we can never entirely eliminate them, due mainly to the element of human carelessness. The aim of treatment is to expedite a complete recovery of function, which is best attained when the procedures run in harmony with the natural processes; that is, with powers of resistance, growth and repair.

The proper procedures in the early history of fracture treatment and the immediate recognition of all local and general pathology are important. Immediate splinting of the part involved regardless of the certainty of a fracture should be done. "Splint them where they lie", thereby preventing unnecessary local trauma and shock. The benefit of splinting a fracture before transportation is attempted was demonstrated forcibly during World War I, when the mortality rate was reduced in compound (open) fractures of the femur from nearly 80 per cent to 16 per cent after the adoption of this procedure. The splinting should be the simplest, most effective and most easily applied. Usually the simpler the splint, the easier the application. In every case the joints which are proximal and distal to even the suspected fracture should be splinted.

The type of treatment depends on the individual case. Each fracture with its complications is a law unto itself demanding individual common sense surgical judgment. The treatment should be adaptable to the fracture, the fracture must not be adapted to the treatment.

The writer does not believe that a standard method for the treatment of fractures in every case possible. Not until every type of fracture can have the same bone and soft structure damage, the same external force producing it, occurring in patients of

Read before the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 14, 1952. From the Conwell Orthopaedic Clinic, 2031 11th Avenue South, Birmingham, Alabama.

the same age and having the same general physical and local conditions with the same resistance or recuperative power, can we hope to standardize the treatment of fractures. If this could be possible, treatment of fractures would cease to be a science and would not demand our own common sense judgement and expert opinion.

Too frequently are superficial and careless physical examination made, the results being that fractures are often overlooked. Certain cardinal physical signs are not always necessary to indicate a fracture. This is especially true in fractures of the spine where a patient may receive a slight or moderate fall on the buttocks, and afterwards suffer very little or no pain whatever in the spine, but when roentgenograms are taken a compressed fracture of one or more vertebrae is seen. A lateral and often an oblique roentgenogram of the spine when one suspects any bone involvement should be made, as well as the anterior-posterior view. We should always be suspicious of a fracture of the spine in even the slightest injury, directly or indirectly, to the back or buttocks.

Roentgenograms, when possible, with antero-posterior and lateral views, should be made before attempting the reduction of a fracture. Following the reduction these same views should be made. These are not only necessary for checking up the position of the fracture, but as a protection and record for the doctor treating the case. Fractures cannot be treated by roentgenograms alone. The reduction of a fracture constitutes only one of the important processes in its treatment.

Early reduction should be done providing local and general symptoms permit. Casts when applied should be cut along the whole course of application if there is any doubt whatever as to circulation. Of course, where the fragments are displaced they should be reduced as early as possible. If, however, when there is marked soft structure involvement and no fear of malposition developing, some simple wire or board splint should be applied with hot wet boric or saline dressings for 24 or 48 hours or longer (remove dressings every 12 or 14 hours and inspecting the damaged parts).

Relaxation during the reduction of a fracture is demanded. This relaxation can be accomplished by continued traction; massage; or spinal, local or general anesthesia; each one having its individual indications and advantages, however, no one type of anaesthetic is to be used in every case.

The majority of all fractures can be reduced by the closed manipulative method and immobilized by circular plaster casts. When doing the closed reduction, care must be taken that no serious local trauma is caused. Repeated attempts at closed manipulative reductions are not necessary before making a decision as to whether the continuous traction or open reduction technique is to be carried out in an individual case. Such type of treatment by the closed method is not a conservative but a radical method of fracture treatment.

We believe that generally more surgical judgment and care are demanded of the surgeon to be able to dextrously reduce a fracture by the closed procedure than by the open method. The surgeon who knows the anatomy, pathology and mechanics of the parts involved, the knowledge of which in the treatment of fractures is imperative, is able to do a closed reduction with minimum trauma. He is a more able surgeon than the one who cannot give such advantages, causing the patient to be subjected to unnecessary traumatizing closed reductions or open operative methods. Too tight bandages, splints or casts must never be applied. Frequent observation during the first few hours following the reduction of a fracture and every few days thereafter should be made. In any fracture living tissue is involved whether it be bones, muscles, ligaments, joints, nerves or blood-vessels, any or all of which demand frequent attention, and without this observation undesirable results will usually occur. Fractures must not be tampered with too often; palpate only when necessary, but observe frequently.

The knowledge of the physiology of fracture repair and the surrounding soft structures is imperative. If we forget these we are not doctors treating fractures but mechanics, and will soon be in ill repute. Don't be like the physician who once asked me the following: "Doctor, the treating of a fracture is nothing more than a simple mechanical problem, isn't it?" We must also treat the general condition as well as the local pathology. Not infrequently examinations will show the cause of a fracture to be a certain bone pathology indicating a local manifestation of some constitutional disease existing before the fracture occurred.

There is now a wave of enthusiasm regarding the ambulatory treatment of fractures. No one believes in earlier motion in the treatment of fractures than the writer, but the laws of Huner and Hilton on rest and immobilization must not be forgotten. Too early weight-bearing frequently brings about excessive, painful callous formation and in certain instances nonunions and permanent disabilities. In certain fractures about the ankle joint with very little bone involvement and no displacement or any possibility of a displacement of the fragments, early weight-bearing soon after injury may be allowed provided a plaster splint and walking iron have been properly applied, and when supervision can be carried out frequently under ideal and controlled conditions.

We have concluded that the patient in the majority of such instances fortunately will control the over-enthusiastic doctor who forces too early weight-bearing of the ankle and leg fractures, because of the pain which he encounters when carrying out such early weight-bearing. The common laws of nature generally will cry out for help against the faddism which is too often practiced by some members of the medical profession.

Even though the majority of fractures can be treated by the closed reduction method with fixation in some form of plaster casts, with as early motion as is permissable, it is the minority in number which cannot be treated with this method and which usually make the majority in trouble. This minority demands, in most cases, our best judgment and opinion and represents probably the greatest difference in the proper and improper ways of treating fractures, resulting in the difference between excellent and poor results.

Skeletal traction treatment, which has usually been classified in the past as conservative, appears to the writer to be rapidly becoming a radical treatment. Too frequently are its limitations and indications being abused. The medical profession should not become overenthusiastic regarding the skeletal traction methods and assume that a panacea has been found for the treatment of all fractures. The writer still advocates and practices the use of skeletal traction in selected cases which in his opinion are ideal, and when indicated, application should be carried out without hesitancy. Rarely, if ever, are these selected cases in children, due to possible epiphyseal injury.

Skeletal traction has saved many extremities when properly used. The method demands close observation and patience. In the majority of instances, if used when indicated, good results will be obtained. Indiscriminate application of foreign material through the medullary canal should not be practiced.

The advantages of skeletal traction are as follows:

(1) It is the only traction whereby one can get maximum traction with minimum application of traction material applied.
(2) Since skeletal traction is direct, therefore, much less weight is required to overcome shortening.
(3) Traction is regular and continuous, which it must be to be effective.
(4) Properly applied, the method is entirely painless, and the patient is comfortable throughout the entire course of treatment.
(5) The lower fragment is at all times under excellent control and can readily be brought into line with the upper one.
(6) Since this leaves the rest of the limb entirely free, active and passive motions may be readily performed at the joints.
(7) Open operation can be avoided in a large majority of cases.

Some of the disadvantages of skeletal traction are: (1) the possibility of infection; (2) the introduction of foreign materal through the medullary canal; (3) distraction of fragments which may cause a delayed or non-union and (4) a rotation of the distal fragment if alignment is not frequently watched.

Adhesive plaster is in common use as skin traction and works well within limitations. A good grade of moleskin adhesive is preferable to zinc oxide adhesive.

Too prolonged traction should be guarded against because it brings about a varied period of temporary muscular paralysis which is difficult to overcome at times, and also, when using skeletal traction for too long a time infections are more liable to occur around or along the course of the wire or pin. As soon as alignment is restored and sufficient callus has formed and when some type of fixation can be applied, the skeletal or adhesive traction should be removed.

Open operative reductions when indicated should be done without hesitation. The indications, however, for open operative reductions before first trying to do the reduction by the closed or traction methods are few. It is not necessary to discuss the technique of different types of internal fixation except to say that as in all other methods of fracture treatment the surgeon should use that recognized standard method with which he is most familiar, and if not familiar wih such methods proper consultants should be obtained.

When delayed union is present be slow to call it non-union, because if surgical interference is carried out too soon in such types of cases the surgeon may be defeating the whole purpose and progress toward union. Frequently patience on the surgeon's part will be rewarded by union taking place. Generally speaking a delayed union is not a non-union until three or four months from the date of injury.

Too early weight-bearing after removal of all fixation, especially in fractures of the ankle or knee joint should be guarded against. Frequently fractures of the knee joint during early convalescence do not show any instability but, if walking is allowed too soon without a support, become unstable. The same is true of ankle fractures.

Physical therapy is helpful in all fractures, not necessarily and entirely machine ther-

Medical Care Cost Low

Medical care costs lag well behind the rapid climb of the cost of living, according to a study made by the American Medical Association's Bureau of Medical Economic Research. These findings, based on statistics presented by the United States Bureau of Labor Statistics, show that in 1951 the price index on all items rose almost twice as many points as the price of medical care. "The consumers' price index (cost of living) has risen 86 per cent since the base period, while the price index of medical care has risen only 55 per cent," stated Dr. Frank G. Dickinson, Economic Research Director.

Physicians' fees also have been climbing much slower than the cost of living, Dr. Dickinson added. The fee index last year was 145.2, representing an increase of 45 per cent over the base period, compared with the 86 per cent rise in living costs. In 1950 the fee index was 140.0.

apy, such as diathermy, but the use of the simple physical resources such as hot water and ordinary heat and lights. Too prolonged fixation is a very disabling procedure. It is not conducive for early function. Early active motion used by the patient is one of the most important procedures in accomplishing good functional results. Hot and cold contrast baths are to be used when sufficient callus formation has taken place to allow the temporary removal of any fixation from the involved part. Massage and other forms of physiotherapy when accessible are of great help. All of these procedures should be under the direct supervision of the doctor treating the case, and when possible in cooperation with a capable physiotherapist of the medical profession.

One of the most important physical agents to use in fractures is exercise. The muscles of the body are expected to work together in the coordinative movements which we use in our daily ordinary work and they will work together longer when there is a purposeful nature in the exercise. Therefore, curative occupational therapy is probably the best exercise and is of the greatest value. Even without expert directions the surgeon can with a little ingenuity use occupational therapy. One's ability as a surgeon in treating fractures is not determined entirely by the method or methods of treatment which he uses but by the functional results obtained. The surgeon behind the treatment is most important. Frequent observations during the convalescent period of a fracture are essential. The surgeon who reduced the fracture should realize that it is not beneath his dignity and responsibility to remove a cast or splint during convalescence and inspect an injured limb, and to reapply the splint, giving his opinion for future treatments. Good surgical judgment is just as necessary during the convalescence of a fracture as at the time of the reduction.

Ultimate results to be attained and hoped for in any fracture are union, alignment and function. When all other factors are equal, perfect bone approximation is usually conducive to early union and restoration of function. However, the possibility of obtaining good functional results when good alignment is present should never be sacrificed merely to obtain perfect bone approximation, because a return to normal function is not always dependent on perfect bone reapposition. This is mainly true in shaft fractures but usually not so in joint fractures where it is best to get as good anatomical position as possible to obtain good function. Finally, function is not only dependent upon union and alignment but also upon full cooperation and determination of the patient to aid himself during convalescence.

The psychologic aspect of the patient with a fracture is an individual problem. A thorough understanding by the patient as to his condition should be explained by the physician, and the patient assured that he will have an excellent chance to recover normal functions if such is at all possible. Due consideration should be given to the compensation case who generally has a longer disability than the corresponding injury in another patient. Confidence of the patient in the physician is essential.

PRESS COMMENT:

Doctors with Civil Service Mentalities

Those who still believe that socialized medicine or government-dominated medicine offers a wise solution to our health problems, should carefully read a long article in the June 16 issue of *The Freeman* magazine by Melchior Palyi, called "How Sick Is State Medicine?" Dr. Palyi is a distinguished Hungarian-born economist who has taught at a number of leading American universities. *The Freeman* sent him to England to make his detailed study of socialized medicine on its home grounds.

Dr. Palyi cites fact after fact to show how socialized medicine, which is mass-produced medicine, has drastically reduced the standards of care. Doctors are enormously overworked—it is a physical impossibility to give the proper time and attention to serious cases. On top of that, much of their time must be devoted to filling out forms and dealing with the mass of red-tape the political bosses have imposed on them. Less and less attention is given to the all-important matter of preventive medicine. Hospital standards are also in decline.

Worst of all, it seems, is what socialized medicine is doing to the individuals whose duty is to care for the nation's health. Dr. Palyi quotes a British doctor as saying, "There will be an entirely different type of man going in for medicine—our future doctors will be small-minded little men with civil-service mentalities, and their main concern will be keeping on the right side of their administrative superiors, the correct filling of forms, watching the clock, and passing the buck."

It is a sorry story that Dr. Palyi tells—and it is a very significant one for Americans. In principle and in direction the Federal compulsory health insurance scheme that is proposed for us is little different than Britain's national health program. Inevitably, the fruits would be the same. The standards of medical care would go down and down—at a cruel cost to our generation and to generations yet unborn.

—Atlanta Northside News

AUGUST V. GAFFORD, M.D., Rome, and
A. PAUL KELLER, JR., M.D., Athens

Is the NASAL CAVITY STERILE?

A study of the bacterial flora of the middle meati in clinically normal and abnormal noses was made in order to determine the degree of infection of the nasal chambers of man.

A sterilized platinum wire loop was inserted into a nasal middle meatus, usually the right, of each of 199 patients for the purpose of procuring a sample of the nasal secretion in that region. A blood agar plate was streaked, and thio broth meduim was inoculated with the secretion. The culture media were then incubated and the organisms found were identified by their cultural and staining characteristics.

Of the 199 patients, 118 presented clinically normal nasal mucous membranes. Eighty-one presented evidence of disease or abnormality of the nasal mucous membranes. This number included 39 patients who had vasomotor rhinitis. Cultures were not repeated on any of these patients during the period of study, which extended from May 19, 1950 through April 25, 1951. These patients were examined and/or treated in the Eye, Ear, Nose and Throat Clinic of the Lawson Veterans Administration Hospital for various complaints, many of which were not related to the nose.

The following organisms were identified:

1. Hemolytic staphylococcus albus.
2. Non-hemolytic staphylococcus albus.
3. Hemolytic staphylococcus aureus.
4. Non-hemolytic staphylococcus aureus, both coagulase postive and negative.
5. Diphtheroids.
6. Bacillus subtilis.
7. Alpha streptococcus.
8. Non-hemolytic streptococcus.
9. Pneumococcus.
10. Alpha aerogenes.
11. Gamma streptococcus.
12. Escherichia coli.
13. Proteus vulgaris.
14. Neisseria.
15. Paracolon.

Hemolytic staphylococcus albus was found in 23.6 per cent of the cases, non-hemolytic staphylococcus albus in 15.5 per cent, hemolytic staphylococcus aureus in 5.5 per cent and the diphtheroids in 8.5 per cent. Negative cultures were obtained in 38.6 per cent of all the middle meati tested.

Hemolytic staphylococcus albus was found in pure culture in 15 per cent of the patients, and in mixed culture in 9 per cent of the patients. Non-hemolytic staphylococcus albus was found in pure culture in 9.5 per cent of the patients and in mixed culture in 8 per cent of the patients.

From 46 clinically normal middle meati hemolytic and non-hemolytic staphylococcus albus and diphtheroids were cultured. Hemolytic staphylococcus albus was found in pure culture in 18 such patients and in mixed culture in eight patients. Non-hemolytic staphylococcus albus was found in pure culture in 11 patients and in mixed culture in three patients. Diphtheroids were obtained in pure cultures from ten such patients.

Pneumococcus, type undetermined, was cultured from nine patients, but only one of these presented a clinically normal middle meatus. Twenty-nine cultures of the remaining organisms were obtained, 16 times in pure culture and 13 times in mixed culture.

Thirty-nine patients displayed evidence of vasomotor rhinitis. Hemolytic staphylococcus albus was procured by culture from 12 of this number, and non-hemolytic staphylococcus albus from eight.

Postive cultures were obtained from the nasal chambers of 69 patients, which clinically, did not appear infected. This represented 56.5 per cent of the patients who had normal appearing nasal chambers.

Summary

Fifteen different organisms were cultured from the nasal middle meati of 199 patients presenting clinically normal and abnormal nasal mucous membranes.

The hemolytic and non-hemolytic staphylococcic organisms were found most frequently.

The diphtheroids, the next most frequently found organisms, were about equally present in normal and abnormal noses.

The pneumococcus was found only once in an apparently normal middle meatus and eight times in obviously abnormal meati.

No growth was obtained from the middle meati of 49 supposedly normal noses and 26 clinically abnormal noses.

From the Department of Otolaryngology, The Veterans Administration Hospital, Chamblee, Georgia.

Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director.

Statements and conclusions published by the authors are a result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

EUSTACE A. ALLEN, M.D., Atlanta

LONGEVITY

Old age is a period which all would willingly postpone, yet it is also that which none would voluntarily forego. Great achievements in all branches of industry, science, statesmanship, and literature have been made by many individuals classified in the old age group. The future of America and the destiny of the world today are in the hands of men beyond the retirement age as set forth by modern planners. Men like Hoover, Baruch, Truman, Churchill, Stalin, Herriot, Vishinsky, and many others who are the leaders in world affairs today, are at the retirement age or beyond. As senescence advances, long term illness becomes more prevalent, producing serious medical and social problems.

Medicine, by its scientific advances, has greatly reduced the incidence of death from infectious and communicable diseases, reduced the infant mortality, and has improved health conditions to such an extent that it has produced a new nation of older people. This aging population, with its accompanying incidence of chronic diseases, with its social security, and with other forms of old age assistance, has brought about a serious problem to our medical, social, and financial systems. As people grow older their medical needs increase. Institutional care increases and they require more nursing. For example, in 1940 only one-fourth of the nation's population was over 45 years of age, yet this fraction required over one-half of the nation's medical service. By 1980 it is expected that one-half of the population will be over 45.[1]

There is always a cry for more financial assistance, through taxation for the aging population. It seems that our politicians would not dare to suggest a halt or a reduction in this form of taxation. In November of 1948, the state of Oregon voted a $50.00 per month pension to all people over 65, whether they needed the money or not. It was then discovered that, if put into effect, this law would soon bankrupt the state. The Oregon officials have been busy looking for loopholes.[2] We are fast approaching an era in which the balance of voting power will be in the hands of the older people. The time has come when the aged can almost dictate their future. The entire population of the United States has doubled since 1900. The population of persons aged 65 or over has quadrupled (12 million today).[1] Between 1900 and 1950 the number of persons in the United States, 65 or over, increased 37 per cent, while the total population increased only fourteen and one half per cent.[1] In 1900 the cradle to the grave schemes could not have been fostered successfully because there were not enough old people. Today it is altogether a different story.

We boast of being the healthiest nation in the world, but just what is health? It is more than the mere absence of disease. It is the product of inheritance, environment, and the conduct of our lives. Through medical improvements and social and economic management, our health standard has advanced rapidly. Thus, we produce this state of longevity. Our health is the best in the world. However, no one has ever attained perfect health and there is still much room for improvement. Scandinavians, as a whole, live longer in America than in their native land. This is true of the Asiatic people, the Mexican, and the Negro. This improvement in health cannot be attributed to climate, soil, or geographical conditions, for they are often identical. It can be due to better living conditions, better working standards, better housing, and better medical supervision. High public health achievements, more physicians per capita, more hospital beds per population, and a high living level make us the envy of the world. Man has not changed, but man's power over his environment has changed. Many facilities which we, in this country, consider necessities are extreme luxuries in most foreign lands. Bath tubs, sanitary systems, automobiles, telephones, radios, and electric lights, which we class as essentials, are unknown by the greatest part of the population of the world. Improved sanitation, better environment, better medical care, and a higher standard of living have been the cause for this longevity. The improvement in the treatment of disease and in our general health has led the public to expect a magic drug that can be injected into the system and will seek out disease conditions in the body and destroy them without injury to the body or loss of time from work. The public must understand that medical care can only improve and will never be perfect.

The problem of life has exercised an irresistable fascination over the minds of men throughout all ages. What is this life we all imagine ourselves familiar with? No one has been able to give a satisfactory answer. No one has been able to place a finger on the mainspring of this wondrous mechanism and say, "This is what moves the whole." You have heard the term, "vital force," but you become confused in trying to define it. "Life is Life," an undeniable truth, but not an answer. Life is creative, it invents, it constructs, it grows and then declines. Every life has a unique role in this universe. Every child born alters the thinking or the way of someone in some manner. Then too, life is the medium of every blessing and is the emblem of good in its highest and fullest sense. A full life must have more than length. It must have depth and breadth. Therefore, it becomes the desire of all mankind to have a full and active life. Often life itself is undervalued and in many countries is considered cheap because

Read before the One Hundred Second Annual Session of the Medical Association of Georgia in Atlanta, May 14, 1952.

its true enjoyment is not realized. War has always reaped its harvest from the young, healthy population of a country. Preventable accidents in this country take a great toll from our young and producing manpower.

The belief that every individual life is sacred; that it must be preserved is a distinguishing characteristic of our Christian civilization. Yet old age is not appreciated by the masses. While the Chinese made old age the most honored period of life, other races went to the other extreme. The Eskimo, facing a bitter struggle for existence, rejected old age as a drain on his social vitality. The old people, when they reached the period when they could no longer care for themselves and provide food, were expected to wander off and die. Some tribes quietly put them to death. In certain African tribes, old and decrepit people were left behind as the tribe moved on. Others placed the aged in abandoned huts with little or no provisions.[2] The American trend has been to ignore old age, to postpone the social issue, and enter into wishful thinking that a solution would be worked out in time. In America today, of 100 persons aged 65 or over, 39 live on charity and 18 on public or private pensions, while only nine are financially able to retire and live on their savings. One-third are still working, either for themselves or others.[3]

Regardless of the handicaps and the somewhat uncertainty of the future, present day advances give us an appetite for an old age which can be a life of enjoyment. The fact that a man can live to a ripe old age cheerfully and enjoy life to the last is persuasive. This is the primary aim of medicine; a long life, a healthy life, and a life free of suffering. We are so much in the habit of thinking that a man must die of disease that we look upon old age as an accident. Under our customs, our passions, and the stress and strain of our way of life, man does not die but kills himself. In reality he, like the old soldier, should "Just fade away."

Man is not a machine. Man grows and reproduces, while a machine cannot. There is not the remotest possibility of developing life from non-living material. Non-living material cannot assimilate, cannot reproduce, and does not die in the same sense as do animals.

Dr. C. Ward Crampton[4] states that there are seven "ages" upon which one's true age can be computed . . . chronological, physiological, pathological, anatomical, psychological, statistical, and hereditary. If one were to determine his age according to each of these standards, it would differ widely from sheer chronological computation. Studying man from these different "ages" would give us a better insight in the aging process and a better outlook in the treatment of the aged. Some men are old at 40, while others are very active and alert at 65 and 70. As we all know, aging goes on throughout life from birth to death. To age is to change. In youth all the powers of the body are directed in growth of the organism and its various functions. During this period the supply is greater than the demand. Therefore, the body grows, the organs develop and the organism reaches maturity. Soon the processes of growth and decay approach equality. This balance should remain equalized for a long time until, at last old age steals in slowly. Decay soon becomes faster than build-up and the body begins to decline. This decay can be postponed early by detection of minor defects, proper care, and early treatment of the degenerative changes. The clock of life is wound up and, barring accidents and disease, will run its alloted time. In other words, the heart has a limited number of beats. This great pump ceases to work when the number of beats has been used up. The faster the heart beat, the shorter the life. A mouse's heart beats 600 times per minute and this animal lives two to three years. Man's heart beats average 72 per minute and he lives beyond his three score years. Each organ has its own time curve of aging, depending on heredity, environment, and adjustment to our external and internal stimuli. Therefore, aging is but a part of the whole cycle of life and not a terminal process. There is no master hormone governing our life. Thanks to nature, all of the phenomena involved in aging do not appear simultaneously.

According to Flourens[5] writing over 100 years ago, the phenomena of life are united in the following chain of relations: The duration of life is given by the duration of growth; the duration of growth is given by the duration of gestation; the duration of gestation by the size and height of the animal (the larger the animal, the longer the gestation). The animal which acquires all its growth in a short time perishes much sooner than another whose growth period is longer. Buffon's theory was that an animal should live five to six times the length of its growth. The horse takes five years to reach his full growth, hence he should live for twenty-five years. The dog matures in two years and lives ten to twelve years. Man grows for twenty years and his term of life should be one hundred years.

Biologically everything grows old. All plants and animals reach maturity and gradually enter a period of decline. It has been estimated by various writers that the physiological life of man should be 100 years. At the present time, few reach that age, but history would indicate that many have far exceeded it. David gave the Biblical statement of three score and ten. Yet Moses lived to be 120 years old; Abraham 175 years; and Sarah, his wife, 127 years. Hallerin[5] collected more than 1100 persons known to have lived 100 years or longer. Easton's book,[5] published in 1799, contained 2000 cases. Baily,[5] in the early part of the nineteenth century, gathered over 4000 cases living to or beyond 100 years. There are many other similar records with no race or nation having a monopoly on longevity.

The term life expectancy is one of limited meaning referring to the calendar year for which it is computed and should never be confused with length of life. Life expectancy for a baby, say in 1910, is the predicted number of years that the average baby will live were he to live all his life in that one year, under the same health conditions. A child born in

1910 has a better chance of living beyond its life expectancy because of better medical care, better living surroundings, and improvements in health conditions. The increase in life expectancy at birth from year to year is a good index as to the health standards of a nation. In other words, the rate of health progress in any nation, as indicated by the increase in life expectancy at all ages, is a good measure of health standards in that country. Naturally, life expectancy is not the same at all ages. If life expectancy and gains were not lower at the older ages, we would soon enter a period of extreme longevity.

The large gain in expectancy of life has been made against infections which take their greatest toll before midlife. We cannot expect so great a change in life extension in the future as has been accomplished in the last 50 years, since the degenerative diseases have become the major health problems, in America, today. There is still room for much improvement. The time has not arrived when medicine can rest on its laurels. Medical care can never be adequate. In fact, the time is here when we must double our efforts to meet this immense toll of prolonged disabilities of the chronically ill.

One may ask if we have reached the utmost in our quest for longevity. We have increased our life span miraculously since the turn of the century. We still have years to go before we can claim the century mark as our life expectancy. More life can be added and the years of life made more useful and enjoyable. The total death rate is the result of many different causes and the part they play in death varies from year to year. Many of these causes can be either reduced or eliminated, thus increasing our life span. Diseases like diabetes and tuberculosis, as well as accidents, can be conquered, adding several years to the life of man. Every cause of death cannot be eliminated, for we are still mortal. Yet we must continue to strive for the goal of our birthright.

In our desire to prolong life and to make old age enjoyable and free from suffering, we must not forget the social and economic implications of our state of longevity. With only nine out of each hundred financially able to retire at the age of 65, and with over 50 per cent requiring aid from some source, it behooves us to study the financial side of aging[5]. Today, with our high educational standards, the preparation of youth for life requires 25 years before self-sufficiency is reached. A man is retired at 60 or 65, leaving about 40 years for productive work. All that a man in his productive years can look forward to is a life of working, earning, and paying taxes, with little hope of acquiring a sufficient enough income to be independent after retirement age. This becomes a serious social and economic problem. A way must be found to lighten the burden of the productive years. This cannot be done by increased centralization of power, increased taxation, destruction of private capital, or loss of individual initiative. These only lead to greater confusion, loss of individual liberty, and foster a feeling of uselessness of frugality on the part of all. Social security or the dole cannot be socialized. Only free people can develop enough wealth to carry on the generous aid, as shown in America, for charity, disasters, and famine throughout the world.

The other side of the question concerns the well-being of the aged. This involves much more than the correction of their economic difficulties. Serious emotional and health disturbances confront this older group. Housing them is already a distressing situation. Living with children or relatives is no solution. Few wish to live as boarders or in an "old folks home." They suffer from idleness and boredom, producing frustration. Unhappiness, especially among the older groups, produces disease or aggravates the existing disability. The degenerative diseases are made worse by unhappiness. Remove these people's unhappiness and you will restore to them an amazing amount of activity. Maturing mankind under happy surroundings will become wiser and more tolerant. They need some kind of occupation to feel that they are of value to their people and to their community. Old people are prone to accidents and illness and the older they become the higher their accident and sickness rate. Catastrophic illness is high in this older group. Sixty per cent of all deaths, today, are due to chronic disorders.

The aged man is a victim of the economic and political stress of our modern world. The producing group must not be alligned against the old age group. The older people must realize that they can still have a life of activity with creative interest. The capacity to learn is only slightly diminished by age. In our present day, old age is often looked upon as an affliction. Some think a man of 50 is too old to learn or physically unable to measure up to required standards of production. This is often spoken of as the age of youth. It seems that the wisdom of experience, the mature judgement, and the emotional stability of age would compensate for the speed and endurance of youth. Older generations are more valuable in this mechanical age than in previous eras. Knowledge obtained from elder workmen is often very valuable. The ability to teach youth should help in producing a better article and a more stable industrial development. To solve this problem of helping the older people to support themselves, not only with respect to finances and health, but also in making adequate use of their leisure, we must turn to the study of the natural and social sciences. We have ample evidence to show that if we use the facilities at hand, health and economical security can be restored to many who, otherwise, will be a burden to their community or to their family.

So far, we have been discussing, in a very brief way, some of the angles of gerontology, the science of aging, with a few of the problems before us. Medical science, through its control of disease, has produced this state of longevity and must face the task of extending man's life, and above all, caring for this aging group. Society has entrusted to the physician the preservation of life. Disability and illness, no matter at what age they occur, whether in childhood or old age, must be regarded as results of disease. Geriatrics, that branch of medicine which

deals with disease and its treatment in the elderly, is not confined merely to the care of the aged. Most of the chronic diseases of later life have their beginning before the age of 50. In the past, all of our attention has been focused on prevention of disease in early life. It is time that we turn our attention to prevention of illness in later life if we desire to lower our mortality rate.

We must keep before us the fact that disease in the aged is not a part of the aging process. We must realize that the infirmaties and disorders of later years arise insideously and long before their clinical manifestation. Minor changes must be looked for and corrected in order to postpone the ills of the senile person. These changes of age are not entirely due to the passage of time, but are usually the results of insults and injuries to the individual which are inevitable in our modern active life. Just as infancy and early childhood are different states than adulthood, so the elderly patient is different in his physical, physiological, and mental make-up to the young adult. Treatment must be altered to meet this change. We physicians must always keep in mind that the primary idea is to preserve the aging person and make him a useful member of society, that we are treating a human instead of a disease. The physician must not question the relative values of the lives he is treating. We did not give life, therefore, we must do nothing to destroy life.

There is, of course, an aging process. Normal aging brings many changes, some obvious, others obscure, but all progressive. Certain biological changes take place. The process of repair of tissues after disease or injury is altered in the aging process. Often the resistance to infections is lowered. With age there is a slowing-up of all the bodily functions. Nutritional deficiencies are common, the skin atrophies, the back becomes bowed, changes occur in the eyes, hair turns grey and becomes thin, and there is impairment of hearing. The functions of the heart and other organs usually are sufficient unless excessive demands are made. The body reserves are decreased and soon the physical response is limited to lesser range. Often the old person resents these physical disabilities. He is disturbed by the fact that he is growing old. The physician, in handling these aged persons, must use methods beyond the realm of medicine.

Medicine has been the leading factor in producing this state of advanced years, with its toll of chronic diseases. Its task is not complete. Medicine must assume a great part in the care of these aged patients and in their adjustments to the many social problems facing the older population. The burden of chronic illness is great and must be tackled with as much enthusiasm and energy as was used in fighting infectious diseases of childhood and early adult life. The plight of those suffering from long term illness must be solved. These conditions will bring about a change in medical practice in the future. We must create a health that corresponds with this duration of life. The treatment of the older person is quite different to that of the young group. Older patients do not react to stimuli as do the younger persons. Drastic alteration in the general status of the patient must be avoided. Preventive treatment for the old age group is as essential as in childhood. The diseases which confront the aging person are slow in their onset. Proper preventive measures will often postpone their development. Methods of diagnosis and treatment of these chronic diseases have made such progress that, today, many persons can be restored to comparative good health. Control and treatment of these diseases depends more upon management and guidance of the patient than upon specific treatment of the disorder. Drugs are absorbed more slowly in the elderly person and frequently have a cumulative effect. Barbiturates, morphine, and scopolamine often excite and confuse these patients.

The medical profession will always have plenty of work to do. As we save patients from diseases of early life, we are only adding another patient to our list of degenerative diseases. Our assignment is the treatment and prevention of disease, and to that task we must dedicate our lives.

REFERENCES

1. Dickerson, F. G.: Economic Aspect of the Aging of Our Population, Read before the Southern Conference on Gerontology, University of Florida (March 20) 1951.
2. Havrghurst, R. J.: Old Age—An American Problem, J. Greontol. 4:4 (Oct.) 1949.
3. Life Insurance Fact Book for 1951, 488 Madison Ave., N. Y. City, Institute of Life Insurance, 1951.
4. Crampton, S. C.: What Geriatrics Means to the Medical Profession, New York Med. 3:10 (May 20) 1947.
5. Electric Magazine, 1857.

DISCUSSION OF PAPER, "LONGEVITY"

By Dr. Eustace A. Allen

Dr. L. Minor Blackford (Atlanta)

Dr. McGeachy has expressed sympathy to Dr. Allen for having such a small audience at this early hour of the morning. Rather we should extend our sympathy, I think, to those unfortunate members of the Medical Association of Georgia who failed to hear this stimulating paper, to my mind one of the most important presented at this meeting. I hope you will all study it when it is published and make your friends do so too.

While it is true that two of our guest speakers have anticipated Dr. Allen in his statistics, that has not lessened the value of his philosophical, yet very practical paper, for he has presented a positive approach to the problem of the aged. Age, as he has pointed out is partly in the eye of the beholder. I remember I thought my captain in a World War I a nice, middle-aged gentleman of 32! Now I feel a man of 32 hardly dry behind the ears.

He has lamented the tendency to retire men automatically when they reach 65. Just day before yesterday the steel companies, who are guilty of this practice, passed over all the high-salaried lawyers in their employ to have eighty-year-old John W. Davis present their case to the United States Supreme Court.

Dr. Allen has stressed the importance of keeping old people occupied and of thus keeping them happy; of making them feel they still belong, that they are wanted. This does not mean they should be spoiled; that a whole family should knock their brains out humoring the whims of the elderly, but it does mean the children should do what they can for them, and above all should keep the Fifth Commandment.

He has stressed the importance of preventive medicine in the aging. This has long been assiduously practiced in pediatics; it is of hardly less importance in geriatrics. Finally he has cogently reminded us doctors of our duties and responsibilities in the care of old people, and may we never forget his exhortations.

Special Articles

Extracts from the las

of the MEMORIAL CENTER

and ALLIED DISEASES--

In reading the last quadrennial report of the Memorial Center for Cancer and Allied Diseases, there were several portions of this report that I thought would be of unusual interest. The sections quoted in this article are by no means the only important and interesting parts of this report, and I would recommend that everyone who is particularly interested in the progress of cancer therapy should read the entire report.

Dr. Bradley L. Coley reports: "The successful results obtained in a growing number of cases of borderline or low grade tumors treated by conservative surgery has encouraged the further use of this method in a carefully selected group. Chief among these conservative procedures is segmental resection with the substitution of massive autogenous or homologous bone transplants."

In November 1946, the first hemipelvectomy was performed on this service, and since then 14 such procedures have been carried out without an operative fatality. Results to date show that this major procedure is indicated in selected cases of secondary chondromyxosarcoma of the proximal femur and innominate bone, but not in cases of osteogenic sarcoma.

A critical study was made of cases of osteogenic sarcoma arising at the site of previously irradiated benign lesions of the bone. This study reaffirmed our conviction that roentgen therapy is not the method of choice for the treatment of accessible benign neoplasms of the bone.

The relationship of benign cartilage tumors to the late development of chondrosarcoma has long been suspected, and a group of 23 cases in which such malignant transformation took place was investigated and the findings reported.

Comment

In one case of osteogenic sarcoma involving the upper portion of the femur and illium seen in our clinic, hemipelvectomy resulted in marked relief from pain and the patient is living and well 13 months. By ligating the external illiac vessels as the first step in the operation and by subperiosteal dissection of the ramus of the pubis, the operation can be carried out with a minimal amount of hemorrhage. Certainly in our case it has been of value even though an ultimate cure may not be obtained.

Dr. Alexander Brunschwig states: "In addition, the possibilities of reducing blood loss during extensive operations are being investigated. The blood pressure is lowered by means of vasodilating drugs and then, at the close of the operation, vasoconstricting drugs are injected to elevate the blood pressure. Dr. Charles Boyan of the Anesthesia Service has been cooperating with the Gynecological Service in this study. The experiences in over 20 instances have been highly satisfactory and unquestionably justify further exploration of this method.

Experimental work in animals (Phemister) performed elsewhere some years ago showed that within limits, hypotension of neurogenic origin is not dangerous to the organism; whereas a similar degree of hypotension induced by experimental hemorrhage is highly dangerous. Gillies of Edinburgh recently induced hypotension with spinal anesthesia and noted

QUADRENNIAL REPORT *or* CANCER *with* COMMENTS

the appreciable reduction in bleeding during operation, but the procedures were of more limited scope than those carried out here. This combination of hypotension induced by drugs and general anesthesia has not yet been attempted systematically anywhere else in this country and if it proves successful will aid materially in facilitating certain complex operations in selected cases.

Comment

In my own experience in radical operations for cancer of the breast it has been found advisable to withhold blood and stimulations until the entire dissection had been completed. Patients handled in this manner had less post-operative shock and responded better to their transfusions than those in whom an effort was made to maintain the blood pressure and blood volume in the operating room.

Dr. Hayes Martin states: "Many innovations and improvements have been made in operative techniques, among these may be mentioned the extension of the combination operations, excision of the primary lesion combined with neck dissection in the treatment of cancer of the larynx, and skin grafting for operative wounds of the mouth, particularly following maxillary resection, and marginal resection of the mandible to obviate the deformity following section of the mandible. There has been a steady increase in the use of surgery for cancer of the extrinsic larynx, pharyngeal wall, and base of the tongue.

Radiation therapy still continues as the method of choice in treatment of cancer of the nasopharynx, tonsil and base of the tongue, and as a necessary adjunct for residual tumor not removable by surgery, and for recurrences.

In the development of radical surgery, a great deal of attention is given to the immediate cause of any post-operative death. It has been interesting to note that in the main types of operations, such as total laryngectomy combined with neck dissection, resection of primary lesion in the mouth combined with neck dissection (Commando), and neck dissection alone, there has been a steady decrease in the percentage of post-operative deaths. For several of the above mentioned types of operations, recently we have been able to list consecutive series of cases, numbering a hundred or more, without a single operative mortality."

Comment

Where possible in carcinoma of the tongue and floor of the mouth, surgery not only produces a higher cure rate but causes less discomfort and disability than the quantity of radiation needed to cure these lesions.

Dr. Willet F. Whitmore, Jr. states: "Since 1948, radical cystectomy or pelvic evisceration has supplanted total cystectomy in the treatment of bladder cancer. The operative mortality is approximately 15 per cent for both procedures. It is of considerable interest and importance that the incidence of lymph node netastases seems to be approximately 40 per cent. In all patients urinary diversion, either to the bowel or to the skin, has been employed. The relative merits of skin versus intestinal ureterostomies are still subject to debate."

Declining

TUBERCULOSIS DEATH RATE NOT *an* INDEX OF CONTROL

H. C. SCHENCK, M.D., Atlanta

It may be assumed for the purpose of discussion that the chances of survival for persons who develop tuberculosis are better today than they were in former years. If so, it must also be conceded that it is possible to have a decline in the death rate from the disease without experiencing any reduction in the occurrence of new cases. The factors associated with the development of tuberculosis are quite different from those which affect mortality and, conceivably, the prevalence of the disease might increase while the death rate is decreasing. It is at once apparent that a declining death rate cannot be employed as an index to measure the change in tuberculosis morbidity.

Recent tuberculin test studies in Columbus, Georgia and in other areas have shown, as in the past, that a large percentage of the adult population is infected. Most of these infected persons, of course, will not develop manifest tuberculosis. A fairly large group will develop chronic tuberculosis and, of these, some will die. Death rates have been declining for a long period of time but the rate of decline has been more rapid in recent years.

Modern treatment, by prolonging the lives of many patients who otherwise would have died but, frequently, without bringing about a complete cure, tends to increase the number of chronic cases. These patients live for many years with slowly progressive disease. Our case load from this source is constantly increasing. It is a most important group for many reasons but, particularly, as a source of infection for others.

The National Tuberculosis Association and the United States Public Health Service estimate that one new case of pulmonary reinfection type tuberculosis per 1,000 adults develops annually, or about 115,000 for the nation. In Georgia the population above the age of 15 years in 1950 was 2,356,091 so we might expect about 2,300 new cases each year. Not all of these cases, of course, will be diagnosed and reported as they develop. Many will not be detected for a number of years and some not at all. During 1951 more than 2,500 cases, including those below 15 years of age, were reported in Georgia. Many of these cases developed in previous years but were not diagnosed until 1951.

The above named agencies have made recent estimates relating to the prevalence of tuberculosis in the United States. Since Georgia is an average state with respect to population and tuberculosis, a fairly reliable estimate of the prevalence of the disease in this state may be obtained by dividing the national figure by 50. The estimated prevalence of tuberculosis in Georgia and the United States is shown below.

	United States	*Georgia*
Total Active and Inactive Cases	1,200,000	24,000
Active cases	400,000	8,000
Inactive cases	800,000	12,000
Total Active Cases Not Hospitalized	265,000	5,300
Known sputum positive	40,000	800
Active—not examined past year	75,000	1,500
Unreported active cases	150,000	3,000
New Cases Developing Each Year	115,000	2,300

*Director, Division of Tuberculosis Control, Georgia Department of Public Health.

The central case register of the Georgia Department of Public Health contains detailed information concerning all reported cases in the state. This information is obtained from local health departments, practicing physicians, Battey State Hospital, Veterans Administration Hospitals, state institutions and from our own follow-up efforts. The table below shows the status of these cases as of December 31, 1951. Obviously, these data provide strong support for the validity of the estimates prepared by the National Tuberculosis Association and the United States Public Health Service.

Analysis of Case Records in Central Register

Stage of Disease	Cases in the Home: Total Cases	Cases in the Home: Active and Convalescent*	Cases in the Home: Probably Inactive	Hospitalized Cases: Battey Hospital	Hospitalized Cases: Veterans Hospitals	Hospitalized Cases: Milledgeville and Reidsville
Far Advanced	2,921	1,621		1,074	226	
Mod. Advanced	3,682	3,070		494	118	
Minimal	2,115	2,040		39	36	
Unclassified	5,262	2,879	1,907	197	41	238
Primary	276	276				
Other	58		48		10	
Totals	14,314	9,886	1,955	1,804	431	238

*Includes about 90 patients in Chatham and Muscogee County sanatoriums.

Of the 9,886 active and convalescent cases in the home, 689 were known to have positive sputum during 1951. In an additional 603 cases, sputum examinations were negative during the latter half of the year after having previously been positive. Of the remaining cases, although the last recorded sputum examination had been negative, a large majority failed to submit specimens during 1951. Considering the number of known positives and the possibility of other cases having positive sputum without coming to our attention, it is apparent that the estimate of 800 such cases living at home is conservative.

The consolidated report of the Georgia Local Health Departments for 1951 shows that 8,188 cases of tuberculosis and more than 35,000 contacts and suspects were admitted to service during the year. This does not include all persons in these categories, since many live in communities not served by health departments and many others refuse examination. Many patients have been discharged against medical advice from tuberculosis sanatoria and hospitals. The Battey discharge notices for 1951 show that of those with tuberculosis who were discharged alive, approximately 40 per cent left the hospital against advice. Moreover, about 70 per cent of them had positive sputum when they returned to their homes. In addition to these, a considerable number of those discharged regularly had positive sputum—over 20 per cent. Having this knowledge, how can we consider the disease as being under control?

It all adds up to this: Only one out of every four of the known active and convalescent patients can be in a sanatorium; chronic cases develop regardless of treatment; relapses of supposedly cured cases occur; more than 2,000 new cases develop each year; the incidence of infection remains high; and though fewer patients die, getting well is a long, tedious, disagreeable and expensive process. Those who must undergo that regime do not believe that tuberculosis is under control. To them, control means prevention.

Tuberculosis will not be controlled until tuberculous infection is prevented, or until some simple and effective immunizing agent is developed, or until an unfailing and quick-acting cure is discovered. The latter is still in the dream stage. Immunization with BCG is not easy and, although it may modify the development of tuberculosis, it is no more effective than natural infection in preventing the disease. Moreover, its safety is being questioned[1] and it should not be used in those already infected. Prevention, as now practiced, is ineffectual.

Until the day when tuberculosis can be controlled otherwise, our efforts should be directed toward the provision of adequate facilities for proper care and treatment of every tuberculosis patient in accordance with his individual needs, and toward preventing the spread of infection. Diagnosis, treatment and prevention are equally required if control of tuberculosis is to succeed. The weak points of our attack must be fortified. The weakest, at present, is prevention.

REFERENCES

1. Drolet, Godias J. and Lowell, Anthony M.: Whither Tuberculosis, Diseases of the Chest, 21:527 (May) 1952.

CHARLES RIESER, M.D., Atlanta

The DOCTOR *of* TOMORROW *and* FEDERAL MEDICAL *Services*

The Hoover Commission was unanimously created by Congress in 1948. The Commission consisted of 12 men, six Democrats and six Republicans, selected by President Truman. In addition, the presiding officer of the Senate and the House of Representativs were members. At President Truman's suggestion, former President Herbert Hoover was named chairman of the commission. The members served for 14 months or more without pay. In order to accomplish the task of attempting to streamline the various government agencies the commissioners were aided by 24 research committees which were called "task forces." Among those committees there was a medical task force of 17 men. Eleven of the 17 men were physicians and the remaining six were experts in hospital administration. Seven of the 17 men were veterans of World War II. Following a thorough study the Hoover Commission made its historic report to Congress in 1949. The commission stated that "The government is moving into uncalculated obligations without an understanding of their ultimate costs." The Commission found the Federal government today is obligated for the medical care of 24 million citizens of whom 19 million are veterans. Furthermore, "integration and coordination of our enormous and expanding Federal, State, and Local medical services could save 150 million dollars in administrative and hospital construction costs." By the cancellation by Congress of the bill to restore 16,000 VA Hospital beds, this 150 million dollar saving has already been effected. The saving does not include the estimated average operating cost of $12 per day per patient. Under the Hill-Burton Act the government is pledged for assistance to voluntary and civilian hospitals in building or expansion operations.

The commission also found that because the government has no coordinated plan of operation for providing the above mentioned facilities, there has been waste, inefficiency and confusion in the duplicating operation of five large and over 30 smaller federal medical systems. The Army, Navy, Air Force, Veterans Administration and Public Health Service are operating completely independent of each other. These agencies are competing for buildings, equipment and personnel. Facilities of one agency are often crowded, while those of a different branch, quite possibly nearby are half empty and their personnel correspondingly idle. Because of their findings, the commission recommended that Federal Medical Facilities be unified. This would mean the creation of a "Department of Health," by which means it would be possible to effect economy in manpower, space, and equipment. There would also be assurance of the wise use of professional talent and the proper economic use of existing facilities. The economic importance of eliminating waste and reduplication is glaring, when it is realized that Federal Medical Activities cost above 2 billion dollars per year. The recommendations of the commission are now summarized before Congress embodied in two bills. These are Senate Bills S 1140 and House of Representative Bill HE 3305. A few examples of waste and excessive expense may be outlined as follows:

In the Veterans Administration during the past year there were approximately 600,000 cases admitted to the hospitals. Of these only 13 per cent were considered service connected injuries or illnesses.

Because of 88 different manuals, 665 varieties of technical bulletins, and the expansion of 9 pages of public law into 994 pages of "explanation," the commission recommended reorganization of the Veterans Administration.

Another disservice results from laxity in the enforcement of the law, by which many veterans obtain admission to government hospitals for free care

---

Read before the General Session of the Medical Association of Georgia, May 13, 1952. Member of the Advisory Board of National Doctors Committee.

simply by signing a so called "Paupers Oath," that they are unable to pay. According to Senator Paul H. Douglas of Ill., an outstanding exponent of economy in government, this practice cost several hundred million dollars annually. Due to the lack of an overall large plan by which the medical needs of the population might be appraised, there is ineffective use of the nations medical manpower and facilities. Some institutions are over-staffed with insufficient numbers of patients for the various reasons.

Under the Hill-Burton Act the government approved the construction of 1,596 projects at a total cost of about 433 million dollars. Because of poor planning many of these projects have been started more or less needlessly in the neighborhood of existing facilities which were not fully occupied. In some sections large veterans administration hospitals are being built while nearby military hospitals are being shut down. A further demonstration of waste becomes evident when one compares the average cost of construction per hospital bed. In voluntary hospitals the cost is about $16,000, while in federal hospitals the cost is $32,000.

Because of the findings of the Hoover Commission, the National Doctors Committee for Improved Federal Medical Services was created. This committee is an affiliate of the Citizens Committee for the Hoover Report. The Committee was established as a means of informing 200,000 odd physicians in our country of all the pertinent facts in the field of National Health as ascertained by the survey made by the Hoover Commission. The Medical Advisory Board of this Doctors Committee is composed of specialists representing all 20 branches of the medical profession. All members of this board as well as the chairman of each of the 48 state committees, have given their services gratis and in the spirit of public service. This committee has two primary objectives: first, the coordination and organization of Federal Medical Services so as to provide maximum and efficient service to the beneficiaries of Federal Medical Care at a cost within the capacity of the tax payers to pay; and second, the conservation and maximum utilization of the nation's supply of trained doctors, nurses, and technicians. By no stretch of the imagination is this group urging socialized medicine. On the contrary each and everyone of the 3,000 plus members totally oppose the very idea of socialized medicine in any form. The motto of this temporary organization is "not more government in medicine but better medicine in government." Because Senate Bill S 1140 and House of Representative Bill HR3305, which represent the recommendations of the Hoover Commission to create in the government a department of health which has cabinet rank, have lain on the desk of Congress for two years, the National Doctors Committee has had for its main purpose the urging of Congress to give this proposed legislation fair consideration and prompt hearing.

These bills suggest the general benefits which would be an outgrowth of the unification and coordination of the entire federal medical system. There would be tremendous advantages to be obtained in the field of research and preventive medicine, more effective and efficient service would be rendered and available to veterans, and adequate care for the general public would become available in the case of atomic war. The creation of a department of health would be constructive to the beneficiaries of Federal Medical Services, to the doctors, nurses, and the technicians who would be a part of the department, to the tax payers of the nation, and to the entire medical profession.

The "climate" in Washington at the present time is right for achieving some reforms in the Federal Medical System. Members of Congress are aware that something should be done to strengthen the present set up and halt the "back door" approach to socialized medicine. Today we are stymied to a large extent because no major medical organization or recognized medical group except the voluntary and temporary National Doctors Committee has come forward to support the reforms.

Hearings on S 1140 have been concluded in the Senate and a report of the sub-committee on reorganization may be expected within the next six weeks. Hearings in the House of Representatives are expected to begin, particularly if the doctors and the major medical organizations profess any real interest, some time before the end of May.

Our time is not unlimited. To achieve results we must act with reasonable promptness. There are two things that can be done immediately which might prove effective.

(1) Each doctor should write a note to Senator O'Conor expressing the hope that the hearings of the Senate will result in progressive legislation.

(2) Each doctor should write a note to Representative William L. Dawson, Chairman of the House Committee on expenditures in the executive branch, calling for prompt hearings on H.R. 3305.

If the doctors do not cooperate to correct this vital situation, if the needed reforms are not carried out, the physicians themselves must be prepared to accept part of the blame. It will be only a matter of time before the medical profession in this country will find itself in exactly the same predicament for which the British Medical profession must assume the major responsibility. You have all recently seen the aggressive attitude and socialistic trend of the thinking of the government in Washington in the seizure of the steel industry. This is an obvious warning. There is no road back. Let us in America keep our ideal of private initiative and efficiency born of private enterprise. By unification of our Federal Medical System, so as to have maximal utilization of medical manpower, facilities, and equipment, we would be protecting our way of life in the field of medical practice. By the creation of a "Department of Health," manned by men learned in the medical arts, a further gap would be sealed from the grasping hand of the politicians, whose ambition it is to take over the practice of medicine.

The Association

Abstract of Proceedings

of the

HOUSE OF DELEGATES *of the Medical Association of Georgia*

at

THE 102ND ANNUAL SESSION

in Atlanta, May 11-14, 1952

Sunday Evening Session—May 11, 1952

The meeting reconvened at 7:15 p.m., Dr. W. F. Reavis, President, presiding.

PRESIDENT REAVIS: Members of the House of Delegates, Members of the Woman's Auxiliary, and Guests: It is our pleasure tonight to hear the report of the President of the Woman's Auxiliary. I will ask Dr. Holton to escort Mrs. Mays to the platform.

Woman's Auxiliary
to the
Medical Association of Georgia
Mrs. J. R. S. Mays, President

As President of the Woman's Auxiliary to the Medical Association of Georgia it is a pleasure to give you a report of our activities and accomplishments from April 1951 to May 1952.

Dr. Reavis, President of the Medical Association of Georgia, appointed as our Advisory Council this year the five immediate past-presidents of the Medical Association. And may I pause here to pay tribute to the memory of a wonderful person—the Auxiliary lost a true friend when Dr. Steve Kenyon left us. Dr. Chaney called a meeting of the Advisory Council to meet with the Executive Board of the Auxiliary, in Macon on May 23rd, at which time plans for the year were presented and approved.

As an Auxiliary to an organization whose purpose is to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws, and to enlighten and direct public opinion in regard to the great problems of state and medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life, we feel that it is our responsibility to help our communities have a better understanding of these high ideals of the Medical Profession.

To achieve this it is necessary for us to be well-informed; to educate the public, and since actions speak louder than words, to participate actively as community leaders in health. To this end we adopted a theme which, I feel, encompasses all Auxiliary activity: EDUCATE — COMMUNICATE — PARTICIPATE.

To equip ourselves with accurate information we have studied the History of the American Medical Association, its functions, and the work of its councils, bureaus and other departments. We have kept abreast with what our legislative bodies are doing at the national, state and local levels. Our Chairman of Legislation, Mrs. Bon Durham, has kept the county auxiliaries up to date on all legislative developments. At the county meetings we have had talks by experts in such timely subjects as Mental Health and Personality, Atomic Medical Care, Nutrition, Communicable Diseases, Public Health Programs, Outstanding Health Problems of the Southeast Region, New Drugs, Cerebral Palsy, and many others. We read current articles on health which appear in popular magazines and if there is doubt about its authenticity, we make inquiry from authoritative sources and are prepared either to defend or discount the article. We read and promoted the distribution of *Today's Health*, the only authentic health magazine for lay people. We study the health facilities and needs of our own communities and in many instances perform valuable services here.

It is only when we are well-informed ourselves that we can bring convincing and accurate information to others.

There are many ways in which we approach the task of informing and educating the public. Excerpts from the report of our Public Relations Chairman, Mrs. J. Harry Rogers, will tell you in part what we have done this year.

One of our larger Auxiliaries sponsored a health education program on "Available Free Health Services for Lower Income Groups", at which several hundred lay people were present. This same group also manned the AMA Exhibit sponsored by the Medical Association of Georgia at the Southeastern Fair for ten days, with members acting as hostesses and explaining the exhibit on quackery. They also entertained the wives of the state legislators at a luncheon meeting during the session of the General Assembly at which time members spoke on the various activities of the Medical Association and Auxiliary. Through the efforts of this same group, arrangements were made for the Public Relations Chairman to participate in the Georgia Products Festival Week in a radio broadcast from WSB, with Dr. Frank Boland speaking on Crawford W. Long, and the Chairman, Mrs. Rogers, discussing "Available Medical Care in Georgia."

Another of our larger Auxiliaries jointly sponsored with their County Medical Society a meeting open to the public at which a member of the faculty of the Medical College of Emory University spoke on "New Drugs in Medicine." There were about 350 people in attendance. This group also set up an exhibit on *Today's Health* for the Children's Book Fair, sponsored by their local Child Guidance Center. Their members have spent 64 hours giving lecture-demonstrations in the use of low cost milk at the Pre-Natal Clinic of the County Health Department.

Another of our larger groups sponsored a panel discussion on "Low Cost Medical Care" for a large number of the lay public. This proved so successful that they were asked to repeat the program. They also have sponsored donors for the Bloodmobile, and assisted the League of Women Voters in demonstrating the use of the new voting machine.

Other counties have furnished speakers on compulsory health insurance to various groups. Another made local arrangements and sponsored the Southwest Regional Better Health Conference. We have distributed thousands of pieces of literature on various health subjects.

These are some of the more specific things done by our groups. All of the Auxiliaries report participation in local community health drives such as tuberculosis, cancer, cerebral palsy, Easter seals, and many others, having charge of many of them. One group sponsored the blood donor clinic for Red Cross at which over 200 pints of blood were received, the largest amount in any one clinic in that town. Most Auxiliaries arranged health programs for schools or other lay groups. We have assisted in forming Health Councils and have shown many health films.

One Auxiliary has given 668 hours in the Pre-Natal Clinic of their County Health Department, doing such work as taking histories, doing blood work and urinalyses, in order to free the public health nurses for home visiting and to do other professional duties. Another auxiliary has an active nurse recruitment program and this year have added $100.00 to their fund for scholarships for nurses entering training in their City Hospital. Another group helps with the Crippled Children's Clinic which serves 11 counties and is held every two months. Five members work all day assisting doctors and nurses, transporting patients and doing whatever is needed.

We, as Doctors' Wives, have been most active as presidents, and as health, public relations and legislative chairmen in important women's organizations and also have taken the lead in Red Cross work. For the next three years the Georgia Congress of Parents and Teachers will be led by a most efficient Auxiliary member, Mrs. Harry Kandel, of Savannah. Another of our members, Mrs. Shelley Davis, of Atlanta, is the Chairman of the Executive Committee of the Better Health. Here in Atlanta tomorrow, one of our Past Presidents of the State Auxiliary Council of Georgia, Mrs. Olin S. Cofer, is retiring as Pres. of the Atl. Women's Club, and her successor is Mrs. Jas. N. Brawner, Sr., our first State President.

It is impossible for me to tell you in 20 minutes what almost 1200 Auxiliary members have done in a year. I will sum it up by stating that in every county where we have an organized auxiliary that community has been made aware of and appreciates the great contribution our auxiliary members make.

Prescription for Longevity

A clue to long life comes from Dr. Morris Fishbein. At the American Medical Association convention, Dr. Fishbein gave his prescription for health and long life. His "five lows" for longevity are: (1) low blood pressure; (2) low pulse rate; (3) low basal metabolism; (4) low diet in total calories and (5) low threshold for humor. He advised this recipe be blended with equanimity and imperturbability.

Mrs. T. A. Peterson, our 1st Vice-president and Chairman of Program reports that all auxiliaries have had a varied and informative health education program this year.

Mrs. R. C. McGahee, our 2nd Vice-president, and Chairman of *Today's Health* reports a total of 376 subscribers this year. *Today's Health* is published by the American Medical Association for the lay public and is one of our most effective means of disseminating authentic health information. Copies have been placed, many as gifts, in school and public libraries, doctors and dentists offices, hospital reception rooms, YMCA's and YWCA's, beauty shops and barber shops, and other strategic places. One Auxiliary, Richmond County, won honorable mention by placing seventh in the National subscription contest.

Mrs. Edgar Dunstan, Chairman of Bulletin, our National publication, reports a total of 133 subscriptions.

The Chairman of Doctor's Day, Mrs. W. P. Stoner, reports that every Auxiliary celebrated Doctor's Day in some way. This is becoming an increasingly interesting project each year as it permits us, like Leap Year, or mistletoe, or Sadie Hawkins Day, to openly demonstrate our admiration for you. This year, through the efforts of Fulton County, Governor Talmadge issued a Proclamation declaring March 30th Doctor's Day. Many fine editorials were carried in state newspapers, radio announcements acknowledged the day, and many churches paid tribute to the doctors from the pulpits.

Our Chairman of Research in Romance of Medicine, Mrs. Milford Hatcher, reports that ten papers, most of them biographies of Georgia physicians, have been sent in this year, thus enriching our file of historical research. These papers are on display in our Exhibit Booth, and I invite you to examine them.

Our Special Project, The Camellia Garden at the Milledgeville State Hospital, which was started in 1949, is being supervised by the Baldwin County Auxiliary with Mrs. R. W. Bradford, Chairman. She reports contributions from five auxiliaries. This sum is used for the purchase of supplies, the work being done by the patients as occupational therapy.

Dr. Edgar Dunstan, as Chairman of the Medical Preparedness Committee for the Medical Association of Georgia, requested the Auxiliary to assist in promoting community interest in Civil Defense. A meeting was called, and all county presidents and chairmen of Civil Defense were asked to attend. Dr. Dunstan, with General Kopf, Dr. Lester Petrie, and Dr. Charles Dowman, and others presented the statewide Civil Defense plans.

Because our program and activities for the year had been made previously, the degree of participation we could undertake for this year was limited. Since it is a continuing project and will be developed gradually we initiated our part of this ambitious program by setting the following goal:

(1) Each Auxiliary member to take the Red Cross First Aid Course.
(2) As many as possible qualify as Instructors.
(3) Make a survey of qualifications of auxiliary members in designated skills.

Our Chairman, Mrs. Leo Smith, reports that many auxiliary members are taking the course in First Aid at present, others have signed up to take the course during the summer.

Of seven counties making the survey—and I shall name them: Ware, Baldwin, Crisp, Fulton, Richmond, Bibb and Upson—qualified members have agreed to participate in the following capacities:

Capacity	No.	Capacity	No.
Graduate Nurse	45	X-Ray Laboratory Technician	5
Anesthesiologist	1	Laboratory Technician	9
Dietitian	5	Dental Hygienist	2
Practical Nurse	7	Red Cross	
Physical Therapist	1	Nurses Aid	13
Social Service	19	Home Nursing	29
Sec'y-Stenographer	43	First Aid	59
Teacher	56		

Our Student Loan Fund Chairman, Mrs. Shelley Davis, reports that we have made two loans this year to medical students in the amount of $1200.00. Since the government G.I. loans are no longer available we have had a sharp increase in the number of applications for this loan. Annual contributions from the county auxiliaries constitute this fund, from which loans have been made since 1930. The amount donated this year is $133.00. The balance on hand is $5030.50.

Several medical students applied during this year but could not meet the requirements. Heretofore, we have not granted loans to married students, but there is a proposed change before the committee to relax this rule.

Other members of th Student Loan Fund Committee, besides Mrs. Davis as Chairman, are Mrs. Lombard Kelly, Mrs. J. Lon King, Dr. Hugh Wood, Dean of Emory Medical School, and Dr. Lombard Kelly, President of the Medical College of Georgia.

Mrs. Ralph Fowler, the President-elect and Chairman of Organization, reports that we have the largest membership in auxiliary history—1,186. Two counties have been reactivated, Habersham and Jackson-Barrow, and we have one newly organized county—Worth. This gives us a total of 33 Auxiliaries, covering 45 counties, with a total representation, counting members-at-large, in 72 counties.

The administrative details of the Auxiliary have been carried on in a most efficient manner by my other officers and chairmen.

I am very proud that during this year the long-cherished dream of having our own publication was realized. The first edition of The Georgia Auxiliary News was published in June 1951, and we have since published three more issues. This paper enables us to reach every member of the Auxiliary, keeping her up to date on our work, and is a means of exchanging news and activities. Clifton, our editor, has done an excellent job of planning, editing and sending out this paper.

We are indebted to you for the financial support which makes this possible, and because of its proven value, it is my recommendation that the Medical Association of Georgia continue the financial support of this publication. I am confident that it will become increasingly important in our work.

In fulfilling the duties of president, my personal activities, as you may well imagine, have been varied, demanding and time-consuming. I have visited in every part of the state, either at County or District meetings. In addition I have represented the auxiliary at the Executive Committee meetings of the Better Health Council of Georgia, and attended the state meeting of the Georgia Society of Crippled Children, sessions of the legislature, the organization meeting of the Bibb Heart Association, to mention a few. I have met many times with various committees in planning different phases of our work.

I was honored to be invited to represent the Auxiliary on the Panel of Discussants at the 2nd Annual Public Relations Press-Radio Conference sponsored by the Medical Association of Georgia.

We have had four Executive Board meetings, an innovation this year being a mid-year session in February which proved most successful. The miles I have travelled this year total almost ten thousand.

Of my activities, one of the most important and beneficial was my attendance at the National Conference of State Presidents and Presidents-elect, in Chicago. I also attended last year while serving as president-elect. The Auxiliary to the American Medical Association conducts this Conference each year. Presidents from 45 stataes were there, as well as all national officers.

Attendance at this meeting is important to a President, and to the President-elect in particular, because it broadens her perspective of auxiliary activities, provides her an opportunity of personal contact with national officers, and presidents of other state auxiliaries, and is most educational in that all phases of auxiliary activity is studied. I was invited to appear on the conference program this year. The topic assigned me for discussion was "The World Health Organization", and my remarks were printed in the December issue of the *National Bulletin*.

I had the privilege of going on a conducted tour of the American Medical Association Headquarters, and I came away tremendously impressed and very proud of what I saw. As much as we have read and studied about the AMA, the magnitude of its physical set-up as well as the services it offers can only be fully appreciated once you have seen it in action. I hope that you have read the series of articles which appeared in the Journal of the Medical Association of Georgia this year under the title "What You Get for Your $25 Dues", by Dr. Eustace Allen. He gives a splendid presentation of the multitudinous activities of the AMA.

As a result of my attendance at these two national conferences, I am positive that I have been able to perform a much more efficient and capable service as President.

I am stressing the importance of this Conference for a definite reason, and I have given much thought to this proposal.

Because of a limited budget, based solely on dues of one dollar a year per member, the travel allowance for the President of the Auxiliary is $100.00, and for the President-elect, $50.00, and I do not have to tell you that this is far from adequate.

A President expects to have to bear a certain amount of expense personally. Short trips in the state are of little consequence. But, when the office carries with it the expectation of two trips to Chicago, once as President-elect, and the other as President,—and I think her attendance has become a necessity in the preparation and performance of her duties—then there is attached a financial responsibility which should be shared.

I would like to recommend that you consider giving to the Woman's Auxiliary to the Medical Association of Georgia the amount of $250.00 for the purpose of travel expense of the President and President-elect to the National Conference.

With your assistance in these financial areas the quality and quantity of work we are doing can be greatly increased.

I have given you only the highlights of our activities—there is much more I could tell you. It has been a pleasant year for me, and a gratifying one because I feel that we have made a real contribution, both to you and to our communities.

Family Medical Tradition

In Jefferson county the Pilcher family has done its share towards providing doctors for the state of Georgia. Dr. J. J. Pilcher, son of a physician, recently watched his own son, J. J. Pilcher, Jr. receive his degree of doctor of medicine. It is an old story for Dr. Pilcher because his other sons; James W. Pilcher, M.D.; George S. Pilcher, M.D. had previously chosen the medical profession. And next fall, another son of Dr. Pilcher, Wallace H. Pilcher, will start his pre-medical studies.

I wish to extend my sincere appreciation to each of you for your loyalty and support.

RECOMMENDATIONS

(1) That the Medical Association of Georgia continue the financial support of our publication The Georgia Auxiliary News.

(2) That the Medical Association of Georgia give to the Woman's Auxiliary to the Medical Association of Georgia the sum of $250.00 (Two hundred and fifty dollars) to be used for the purpose of travel expense of the President and the President-elect to the National Conference in Chicago.

PRESIDENT REAVIS: Mrs. Mays, I am sure all the members of the Medical Association of Georgia appreciate what you have done this year and what every member of the Woman's Auxiliary has done.

We have one other committee from the women's organization to hear from. Before we let the ladies get away, Mrs. Davis, will you report as chairman of the Better Health Council?

Report of Better Health Council
Mrs. Shelley Davis, Chairman

The Better Health Council of Georgia, with the support and guidance and direction of the Medical Association of Georgia and other organizations, has become a privately financed, active force for better health in less than one year's time.

In 1948, when Dr. Steve Kenyon, Dr. Ed Greene and Dr. Enoch Callaway approached the Governor of Georgia to secure official aid in organizing a conference for better health in the state, the Governor offered staff service by a tax-supported agency, the Georgia Citizen's Council. With NO funds, the Conference gratefully accepted this service until 1951 when the state legislature saw fit to cut the appropriation for The Citizen's Council and the Health Conference was then left with an overwhelming program and no office or staff.

Realizing the value of such a statewide coordinating health program with laymen and professional groups, labor and management, colored and white, working together at the grass roots level, the member agencies and organizations vowed to continue from private donation the Better Health Conference.

Eight months of basic planning and reorganization, although time-consuming, has brought a broad, firm foundation that can support the many expanded activities anticipated.

The name was officially changed to The Better Health Council of Georgia and although a budget of $10,000.00 per year was estimated to continue the program, only $4,045.00 has been received in donations since July 1951. Thus many of the urgent phases of the Council work necessarily had to be curtailed since we were financially able to employ a secretary only half-time to work with a full-time stenographer. Office space and telephone are being furnished by a member agency, but still such elementary equipment as typewriters, desks, chairs, filing cabinets etc. are badly needed.

In spite of all of the many tedious hardships that come with any reorganization, a most active program has continued. The legislative committee saw active service during the recent session of the General Assembly of Georgia, organizing public hearings and supporting many health bills endorsed by the Medical Association of Georgia and opposing those thought to be unsound by our medical profession.

The cry, "We don't have personnel trained to teach the health programs advocated by organized medicine", is a challenge which the Health Education Committee poses to accept and aims to solve. This representative group from our universities, social agencies and civic leaders will complete a curriculum survey, June 13 with recommendations to the state Department of Education and the Teacher, Education Council for training of teachers and any workers in health related fields. The Public Information section of this committee is publishing the Council's periodical with a circulation of over 1500 in addition to planning and coordinating many news releases and radio and TV programs of the member agencies and also establishing and maintaining pamphlet racks of approved health material in schools and public libraries.

The committee for the Study of Care of the Aged and Chronically Ill has begun a thorough investigation of the existing problems in the state. This program requires patience and time in order to do a worthwhile job on recommending a long range plan.

The Civil Defense committee is working under the supervision of the Medical Association of Georgia's chairman and has already served in bringing together necessary organizations to establish the Georgia Plan in the Health and Medical Services division of Civil Defense.

And last but certainly most important of all is the Council's service in organizing local Health Councils and serving the 17 Councils already organized.

The Annual Meeting, planned for Macon, September 25-26 will feature the Local Health Council, its opportunities to serve the community and in turn the state of Georgia. It is the hope of the Council that the American Medical Association's field specialist on Health Councils will be available to participate in this program.

In retrospect, it is astounding that so much has been done with so little funds or equipment. Enthusiastic participation of John Q. Citizen, the layman, is surely the answer. No individual organization or agency can attract as widespread support as a united council with all working together.

Surely such worthy, momentous, urgent health programs merit not only continued but increased financial and active support of all groups whose business is Better Health.

The Executive Board respectfully urges and requests the continued interest, guidance and support of the Medical Association of Georgia in this tremendous responsibility of our times—Public Relations and Relationships.

PRESIDENT REAVIS: This report will be referred to Reference Committee No. 5.

The next report is that of the Committee on Insurance and Economics. Dr. W. S. Dorough, Chairman.

Report of the Committee on Insurance and Economics
Dr. W. S. Dorough, Chairman

The Committee feels that the Association should be proud of the progress made during the first year of its "Georgia Plan" operation. While the enrollment of policyholders is not as large as we would like it to be, we feel that 50,000 participants in the first year is well above the average shown by states with similar plans in their first year of operation. The mere fact that this number of people have been made aware of the need for health protection, and have done something about it, is most important in an educational way. You, as doctors, can help by advising your patients to protect themselves and assuring them that the companies and insuring agencies authorized to sell the "Georgia Plan" will meet their obligations as they are governed by the specifications which have been set up. Promotion of the "Plan" is primarily the responsibility of the profession. The profession at times may feel that there are inequalities in the Plan, but they can rest assured that the committee is well aware of this and other "shortcomings" and is constantly planning for the future when this can be corrected. Cooperation of the profession is asked and when the "Plan" has had sufficient time to get a start, the specialties and other groups will be asked to sit down with the committee and iron out all difficulties within reason. The profession must realize that higher fee benefits and greater coverage of illnesses add cost to premiums. Education of the people must be accomplished before high premium contracts can be sold. Your committee is probably less satisfied with the "Plan" than any complaining member of the profession, but it is its opinion that a solid, sane program, however insufficient it may be, will create good will and be sound basis for future building.

The committee is always cognizant of the fact that this is the "Georgia Doctor's Plan," and with this in mind set up its specifications so that there could be no complaint on the part of the public as to what the plan proposed to do.

The public, the doctors and the insuring agency are equally protected. We feel that this creates good will for the profession at a time that it needs it.

Members of the committee have met with civic groups during the year. The Public Relations Department has been most kind in doing its part and helping in all matters pertaining to the plan. We have found that the public is intensely interested in all health plans. It is the professions responsibility to furnish them with honest and reliable information showing them that nothing is given away that is worthwhile and that the greater number protecting themselves against illness will allow a spread of the hazard and therefore a cheaper premium for greater coverage.

The Committees officially met at 10 a. m. on January 30 in the offices of the Medical Association of Georgia, and discussed the problems which it had encountered up to that time. There were many requests from insuring agencies for clarification of several items in the schedule of fees. These were clarified to the satisfaction of all parties concerned. Such details involved much time and effort on the part of your committee throughout the year and we feel that eventually this will of necessity be a part of the Executive Secretary of the Association's responsibility. Mr. Wrightsman and his office force have been of invaluable assistance in this capacity during our first year of operation.

The question of Blue Shield participation in the "Georgia Plan" was discussed at length. The Committee, as a whole, is most desirous of obtaining the support of these organizations and in having them incorporate the "Georgia Plan" in their contracts. The Physicians Service Association of Savannah was commended for their cooperation in making the necessary changes to conform under the Georgia Plan. Regret was expressed that the Physicians Service Group of Columbus has not been able to make the changes necessary to conform under the Georgia Plan. We sincerely hope that at sometime in the near future this can be accomplished, and every effort will be made by the committee within the framework of the Plan to accomplish this.

The Brotherhood of Railroad Trainmen presented their plan of insurance and wished to be given approval under the Georgia Plan. The Committee could not give approval of their policy under the present set-up unless they wished to put the Georgia Plan schedule in its entirety in their policy. This was not their desire at the present time. The legal advisor of the Health Insurance Council, Mr. James Andrews of New York and several members of the Georgia sub-committee of the Council appeared before the Committee and several problems were taken up which concerned both th Association and the Insuring Agencies. The question of determination of family income with regard to the clause stating "$3600.00 subscriber's income". The Committee felt that in a very few cases this would be abused by a subscriber. The insurance group was asked how the insurance groups felt about changing this from "subscriber's income" to "aggregate family income". The insurance group was asked only in an advisory capacity as it fully realizes that it does not set the rules of the Association. As several issues are involved as salability of the policy, determination of aggregate income, together with many minor problems, suggestion of a change to principal wage earner's income was discussed and Mr. Andrews promised to make a study of this throughout the industry and make recommendations from his group's standpoint as soon as this could be established. The consensus of opinion of all was that no change should be made until a general revision of the Plan was made.

The Committee then discussed the matter of legal fees charged the insuring agencies for examination of policies submitted for approval. The companies had complained bitterly, and some refused to comply, as this was a police action of the Association for its own protection. The Companies do not feel that they should be asked to pay for a review of their own policies when they pay a salary or fee to their own attorneys for the same purpose. The Committee as a whole feels that Council was ill-advised in this matter and sincerely requests that this order of billing the insuring agencies be rescinded. There has been much time and effort spent in gaining the confidenc and cooperation of the insuring agencies and this has done much to counteract this feeling. In the future there will be only a few policies presented for review and the expense would not be too heavy on the Association. The Committee would appreciate prompt action on this as some companies are holding off in participating in the "Plan" for this reason.

The Committee recommends that the Council and House of Delegates authorize the Committee, under its present set-up, to establish an Advisory Board composed of laymen and physicians for promotion, administration and establishment of good will. This is regarded as a most important step at this stage of our "Plan".

The Committee sincerely requests the forebearance of the profession in the progress of the Plan. Cooperation is sought from all members! Remember that an argument can always arise in discussion of any fee schedule, but also remember that when you begin to tear the schedule apart, that it is designed for one income group and the fee schedule cannot be more than the premium rate will support. If the rate is raised, and is too high, the contract cannot be sold to the people for whom it was intended. Give your Committee the necessary cooperation.

The Committee wishes to express its sincere appreciation to the profession as a whole for its kind cooperation during the year and requests that the same be given to the Committee to be appointed for next year.

This Committee has functioned as a representative group of the Association and has always been aware of the fact that the Plan is the Association's Plan and endeavored to make it just that.

This report is submitted for your consideration and approval.

PRESIDENT REAVIS: Thank you, Dr. Dorough. As President of the Medical Association of Georgia I wish to commend and thank Dr. Dorough and his Committee for the wonderful work they have done, not only this year but in the years that they have served in this capacity.

This report will go to Reference Committee No. 5.

Next is the report of the Orthopedic Committee.

Report of the Committee on Orthopedics
Dr. J. H. Kite, Chairman

Eleven orthopedists on the committee were invited to a meeting May 10, 1952. One came in addition to the chairman, Dr. Walker Jernigan.

We recommend that this committee be abolished.

This is referred to Reference Committee No. 3.

The Student Loan Fund has been reported on by the President of the Woman's Auxiliary, and is referred to Reference Committee No. 5.

Committee on Awards. Dr. Charles Richardson, Sr., do you have a report?

Award Committee Report
Dr. Charles Richardson, Chairman

DR. RICHARDSON: Mr. President and Members of the Council: The Committee on Awards has one award to make this year. The Hardman Cup is to be given for meritorious service or scientific research. The Cup will be awarded Tuesday evening to Dr. T. F. Sellers, of the Department of Public Health of this State, in recognition of the work he has done on rabies. Dr. Sellers will be unable to attend, but his son will accept in his absence.

PRESIDENT REAVIS: Thank you, Dr. Richardson. This report is referred to Reference Committee No. 1.

Report of Committee on Constitution and By-Laws
Dr. Enoch Callaway, Chairman

The Committee recommends the following amendments to the Constitution and By-Laws of the Medical Association of Georgia:

(In the quoted passages which follow, a word or phrase within brackets indicates a deletion from the existing text, while an italicized word or phrase, an addition to the present phraseology, as proposed by the Committee.)

Republican Platform Plank

"We recognize that the health of our people as well as their proper medical care cannot be maintained if subject to bureaucratic dictation. There should be a just division of responsibility between government, the physician, the voluntary hospital and the voluntary health insurance. *We are opposed to federal compulsory health insurance with its crushing cost, wasteful inefficiency, bureaucratic dead weight and debased standards of medical care.* We shall support those health activities by government which stimulate the development of adequate hospital services without federal interference in local administration. We favor support of scientific research. We pledge our continuous encouragement of improved methods of assuring health protection."

PROPOSED AMENDMENTS TO THE CONSTITUTION:

1./ Article VI, Council, Sec. 2:

"Sec. 2. The Council shall consist of the President, the President-Elect, the Secretary-Treasurer and one Councilor from each [Congressional] *Councilor* District in the State of Georgia."

2./ Article VIII, District Societies:

"In order to promote the best interests of the profession, the House of Delegates shall provide for the division of the State into Councilor Districts which [shall] *may* be coextensive with the Congressional Districts in Georgia, and for the organization of all component county societies in the districts into Councilor District Medical Societies."

3./ Article IX, Officers, Sec. 1:

"Sec. 1. The officers of the Association shall be a President, a President-Elect, two Vice-Presidents, a Secretary-Treasurer and one Councilor, *or, in his absence, a Vice-Councilor,* from each of the Councilor District Societies as provided in the By-Laws. All elections shall be held as prescribed in the By-Laws."

4./ Article X, Funds and Expenses:

A comma added in line eight following the word, "publications."

PROPOSED AMENDMENTS TO THE BY-LAWS:

1./ Chapter 1, Membership, Secs. 3, 5, 6, 7, 8, 9, 10 and 11:

"Sec. 3. Membership in the Association shall be classified as active, associate, honorary, [and] life, *and scientific.*

"Sec. 5. Associate Members. (beginning line 9) . . . . Associate members shall be entitled to all the rights and privileges of the Association except that they shall not pay dues *or* receive The Journal. [or be eligible for Medical Defense.]"

"Sec. 6. Honorary Members. Eminent physicians and other persons who have distinguished themselves in the science of medicine, or for contributions to human welfare, may be elected to Honorary Membership in the Association by the House of Delegates upon nomination by any component county society *and approval of the Committee on Professional Conduct of the Medical Association of Georgia.*, etc."

"Sec. 7. Life Members. A life membership may be granted by the House of Delegates, upon the recommendation of the component county society, to any physician who has had not less than forty years of active membership in the Association[.] *or has passed his seventieth birthday.* He [is] *shall* not *be* subject to payment of dues.

"Sec. 8. Scientific Members. Any Negro physician meeting qualifications as set forth in Section 1 may be granted scientific membership by the component county society, upon application, and be awarded the privileges of participation in all scientific sessions. Such members shall pay no dues to the county society or State Association, but may be subject to payment of all dues and assessments of the American Medical Association. Scientific members shall not be entitled to hold office or vote in the county society or the State Association, nor shall they be entitled to Medical Defense."

Present Sections 8, 9, and 10 revised to read Sections 9, 10, and 11, respectively.

"Sec. [10] *11.* Eligible physician members of the State and Federal medical services and full time members of approved medical faculties *not engaged in private practice of medicine* shall pay half the annual dues, etc."

2./ Chapter III, House of Delegates, Secs. 2, 3, 4, and 6, and 7:

"Sec. 2. Each component county society shall elect one delegate and a corresponding alternate for each [fifty] *twenty-five* members, or fraction thereof, etc."

"Sec. 3. [Thirty] *Forty* of the registered members of the House of Delegates shall constitute a quorum, etc."

"Sec. 4. The House of Delegates shall be presided over by The President and in his absence, by a Vice-President or by a delegate agreeable to it.] *a Speaker, or a Speaker pro tem, whose election shall be the first order of business at the opening session. In the absence of both, a delegate agreeable to it may preside."*

"Sec. 6. The following shall be the general Order of Business at all meetings of the House of Delegates: 1. Call to order by the President; 2. Roll Call; 3. [Reading and adoption of minutes] *Election of Speaker and Speaker pro tem;* 4. Reading and adoption of minutes; 5. Reports of officers; 6. Reports of Committees; 7. Unfinished business; 8. New Business."

"Sec. 7. For the purpose of expediting proceedings the President shall appoint from the members of the House of Delegates the [following] Reference Committees[: 1. Committee on Credentials; 2. Committee on Reports of Officers; 3. Committee on Scientific Work; 4. Committee on Public Policy and Legislation; 5. Committee on Economics; 6. Committee on Miscellaneous Business] and other committees considered necessary, etc."

3./ Chapter IV, Council, Secs. 2, 9, and 11:

"Sec. 2. The Council shall be composed of the President, the President-Elect, the Secretary-Treasurer and one Councilor *or Vice-Councilor* from each Councilor district, etc."

"Sec. 9. (beginning line 8) . . . A physician residing in a county not having a component society, shall be referred to [the nearest] *an adjacent* component county society, etc."

"Sec. 11. (beginning line 5) . . . The Council shall adopt an annual budget providing for the necessary expenses of the Association, which shall be prepared and presented for its consideration by the Committee on Auditing and Appropriations at the [first] *last* meeting of the Council in the [first] *last* quarter of each year, etc.

4./ Chapter V, Election of Officers, Secs. 1, 3, and 4:

"Sec. 1. The President-Elect, Vice-Presidents, Secretary-Treasurer, [and] Councilors *and Vice-Councilors* shall be elected by ballot by the members of the Association. Nominations for these officers except Councilors *and Vice-Councilors* shall be made orally as the [first] *last* order of business at the [beginning of the afternoon] *first* meeting on the first day of the scientific session. [before the presentation of any papers.] No nominating or seconding speech shall exceed two minutes. The President shall appoint a Committee of *not less than three* Tellers immediately after the close of nominations *who shall have charge of the election."*

"Sec. 3. The Secretary-Treasurer shall have prepared in advance an official ballot. One ballot shall be given to each active voting member when [requested] *he presents himself to cast his ballot.* Such member and no other shall prepare his ballot and shall deposit it *at that time* in a locked ballot box provided by the Secretary-Treasurer and kept in [his] *the* custody [or that] of the Tellers designated by the President. The key shall be kept by the [Secretary-Treasurer of the Association or] Chairman of the Tellers."

"Sec. 4. (beginning line 7) . . . The candidate for President-Elect receiving a majority of the votes shall be declared elected, *but if no majority is received on the first ballot, the members present shall select the President-Elect from the two*

candidates having the highest number of votes by secret ballot. etc."

5./ Chapter VI, Duties of Officers, Secs. 1, 3, and 4 (a):

"Sec. 1. The President. The President shall preside at [all meetings] *the organization meeting* of the House of Delegates and *at all meetings* of the Association and shall appoint all committees not otherwise provided for. He shall deliver an address at such time during the annual session as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession *and of the Association in* the state during his term of office. [and] So far as practicable *he* shall visit by appointment the various district societies, etc."

"Sec. 3. The Vice-Presidents. The Vice-Presidents shall assist the President in the discharge of his duties. Upon request *or in the absence* of the President, the Vice-Presidents will preside over the general meetings of the Association in rotation, etc."

"Sec. 4. The Secretary-Treasurer. (a) (beginning line 6) . . . He shall be Secretary of the Council and its Executive Committee *and ex officio member of all committees.*"

6./ Chapter VII, Component County Societies and District Societies. Secs. 1, 2, and 11:

"Sec. 1. County and District Societies. (at end of Section 1) . . . *A component society shall consist of three or more active members.*

"Sec. 2. Charter. (beginning line 7) . . . The House of Delegates shall have authority to revoke the charter of any component county society or district society whose actions are in conflict with *the letter or spirit of* this Constitution and By-Laws, etc."

"Sec. 11. Purposes and Duties of District Societies. District Societies shall have [two] *one or more* meetings during the year, etc."

7./ Chapter IX, Standing Committees, Secs. 1, 2, 4, 10, 11, 12, 13, 14, and 15:

"Sec. 1 (b) Committee on [Public Policy and] Legislation

(*h*) *Committee on Maternal Welfare*

(*i*) *Committee on Rural Health*

(*j*) *Committee on Industrial Health*

(*k*) *Committee on Public Relations*

(*l*) *Committee on Cancer*

(*m*) *Committee on Insurance*"

"Sec. 2. (add to last line) . . . *All committees shall make an annual report in writing to the Association headquarters office sixty days in advance of the Annual Session.*"

"Sec. 4. The Committee on [Public Policy and] Legislation. etc." (Each reference thereto in Section 4 to be corrected accordingly.)

"Sec. 10. The Committee on Maternal Welfare shall be composed of seven members, three of whom shall be general practitioners. It shall regularly review and analyze the causes of all maternal deaths occurring in the state. It shall investigate conditions affecting maternal care in Georgia and make recommendations concerning improvements thereof. It shall establish a working liaison with the Georgia State Obstetrical and Gynecological Society and the Georgia Pediatric Society and shall consider the establishment of annual postgraduate regional courses in obstetrics throughout the state with the cooperation of the Committee on Medical Education and Hospitals. The Director of the Maternal and Child Health Division of the State Department of Public Health shall be a member of the Committee on Maternal Welfare and shall act as its secretary for all purposes of convenience."

"Sec. 11. The Committee on Rural Health shall concern itself with improving medical service in the more sparsely settled areas in the state. It shall be composed of one member from each of the Councilor Districts comprising the Association, in addition to the Director of the State Department of Public Health who shall be a member ex officio. It shall investigate and make recommendations as to locating and staffing health centers and shall cooperate with the Council on Rural Health of the American Medical Association. The Committee shall designate a member to represent the Medical Association of Georgia at national conferences on rural health."

"Sec. 12. The Committee on Industrial Health shall be composed of eight or more members so that there may be one from each of the major industrial areas in the state. The Director of the Industrial Hygiene Division of the State Department of Public Health shall be a member ex officio. The committee shall confer with both labor and management in stressing the importance of preventive rather than curative medicine. It shall investigate and make recommendations concerning the initiation of programs designed to improve safe working conditions for employees and to solve other industrial health problems. It shall cooperate in all respects with the Council on Industrial Health of the American Medical Association."

"Sec. 13. The Committee on Public Relations shall be appointed by the President. It shall be the duty of the committee to integrate and publicize all approved plans and projects emanating from the Council and other standing and special committees of the Association. It shall consider all policies and make suggestions and recommendations for improving or changing such policies for the purpose of integration and publicizing. It shall develop additional projects for bettering understanding between physicians and the public."

"Sec. 14. The Committee on Cancer shall consist of one representative from the Association, one from each of the State-Aid Cancer Clinics, and one each from the Medical Colleges in the state who shall serve not less than three years, and the President shall appoint the chairman from among the members having the longest service. The chairman shall submit a list of physicians' names representing these groups for appointment by the President. An Executive Committee of this committee consisting of not less than six members shall be appointed by the President upon recommendation of the chairman.

"It shall be the duty of this committee to represent the members of the Association in dealing with all matters pertaining to cancer, and in particular, it shall advice with the Division of Cancer Control of the Department of Public Health."

"Sec. 15. The Committee on Insurance or Insurance Board shall consist of not less than five members appointed for a period of five years in rotation by the President. The Committee may elect one of its members to be chairman or request the President to designate a member as chairman. Members appointed during the first four years shall serve staggering terms as designated by the President.

The four geographical quadrants and the central industrial area shall have representation on this committee. Also the chairman may nominate five lay persons with known interest in the field of insurance for appointment by the President, who shall serve with the Board in an advisory capacity.

"It shall be the duty of this committee to formulate and administer all policies and plans pertaining to insurance insofar as such concern members of the Association. In particular it shall sponsor and promote The Georgia Plan including provision for necessary expenses."

8./ Chapter X, Special Committees, 2

Delete: ["2. Insurance and Economics"] changed to Standing Committee under the title of Committee on Insurance.)

9./ Chapter XI, The Journal, Sec. 2.

"Sec. 2. The Council may employ [an Executive Secretary and] a Business Manager of The Journal *and other personnel* and fix the terms of such employment."

PRESIDENT REAVIS: Gentlemen, this is such a controversial matter that I wanted you to hear it separate from any other report. This is referred to Reference Committee No. 6.

Is Dr. Hanson here, Chairman of the Liaison Committee to the Georgia State Medical Association Negro organization? [No] Is anyone here to give that report? [No]

SECRETARY POER: There is no report from them.

PRESIDENT REAVIS: I will ask Dr. Callaway to read the report of the Committee on Cancer.

Report of the Cancer Committee
Dr. J. Elliott Scarborough, Chairman

The Cancer Committee of the Medical Association of Georgia has been privileged to work in close collaboration with all of the cancer activities which have to do with public and professional interest in the State. Through its Advisory

Committee to the Division of Cancer Control of the Georgia Department of Public Health, it serves to coordinate the activities of this division with the educational and service programs of the Georgia Division of the American Cancer Society.

There has been one general meeting of the entire Commission held on Sept. 14, 1951 in conjunction with the meeting of the American Cancer Society. The formal meetings of the Advisory Committee to the Division of Cancer Control were held on July 14, 1951 and May 3, 1952. It is gratifying to be able to report that all members of the Advisory Committee have been present at all meetings, many times with much sacrifice to themselves. Problems relating to State Aid Cancer Clinics have been taken up at these meetings and at other times through correspondence with various members. We are most grateful for the complete cooperation of Dr. W. J. Murphy, Head of the Cancer Control Program of the Georgia Department of Public Health and also for the interest manifested by Mr. Lon Sullivan, Executive Vice-President of the Georgia Division of the American Cancer Society. The latter has been invited to sit in on all the meetings in order to correlate the activities of the voluntary health program with that of the State. This has been most helpful also in taking care of the problems arising out of unusual situations. In the past year, the Cancer Committee in cooperation with the Georgia Division of the American Cancer Society an dthe Georgia Department of Public Health has sponsored clinical programs such as that held at the West Georgia Cancer Clinic in LaGrange, Georgia on July 18, 1951. These organizations also cooperated with the Georgia Chapter of the American College of Surgeons in arranging and putting on an afternoon's cancer program at their meeting in Augusta. In addition, it has encouraged the enlargement of the educational program at the County and District Medical Society levels.

The Cancer Committee has encouraged establishment of Cancer Clinics on a geographical and population basis and it has approved and sponsored the inspection of established clinics by the American College of Surgeons. At the time of this report, there are 17 such clinics approved.

The Committee feels that no patient with cancer fails to get treatment for want of funds, facilities or physicians; however, there is need for improvement in all these fields and with the established programs and with continued cooperation which exists from our profession, we can look forward to one of the best cancer programs in the nation.

PRESIDENT REAVIS: Thank you. This is referred to Reference Committee No. 3.

We have another matter concerning the report of the Constitution and Bylaws Committee.

SECRETARY POER: That refers to membership in the AMA and MAG for men 70 years of age.

DR. CALLAWAY: It says, "By special mail vote, the Committee on Constitution and Bylaws unanimously approved amendment to Chapter I, Membership, Section 7 of the Bylaws, as follows: (Additional phraseology to existing text appears in italics.)

" 'Sec. 7. Life Members. A life membership may be granted by the House of Delegates upon the recommendation of the component county society, to any physician who has had not less than 40 years of active membership in the Association, *or has passed his 70th birthday.* He (is) *shall* not *be* subject to payment of dues.' "

PRESIDENT REAVIS: Do you want to incorporate that in your report?

DR. CALLAWAY: Yes, sir, I do.

PRESIDENT REAVIS: That will be referred to Reference Committee No. 6.

At this time I will ask if we have with us any fraternal delegates from other states. Are there any present from adjoining states who have come and would like to speak to us? [No]

SECRETARY POER: Dr. Callaway thought we might explain the difference between life and honorary memberships, since confusion exists on that point in some societies.

Honorary membership is strictly just that from now on, beginning with our new Constitution and Bylaws, at which time we might elect any outstanding physician to honorary membership. It has nothing to do, however, with a man's age, as it did in the past, and that type of membership was referred to in the old Constitution and Bylaws as a life membership.

The change in the Bylaws simply brings us in line with the AMA, which grants life membership, without payment of dues, to any physician over 70 years of age.

PRESIDENT REAVIS: And who have 40 years of the practice of medicine.

SECRETARY POER: In Georgia we say they have 40 years or more of practice. From now on they are life members. We have a lot of them in Fulton County. They are no longer honorary members. Honorary members will be strictly honorary, and will be granted honorary membership for their outstanding contributions, but not on the basis of age.

DR. MARION PRUITT: Couldn't one individual be both?

SECRETARY POER: He certainly could.

PRESIDENT REAVIS: Gentlemen, if we have no visiting delegates from other states with us this evening, we will proceed with the business.

Dr. Bunce, do you have a report concerning the revision of the Pharmacopoeia?

DR. ALLEN H. BUNCE: We have no report, Mr. President.

PRESIDENT REAVIS: We will now call for the report of the Committee on Pediatrics and will refer it to Reference Committee No. 3.

Report of Committee on Pediatrics
Dr. Philip A. Mulherin, Chairman

There have been no meetings of this Committee this year and there have been no matters referred for consideration of this Committee.

The Committee members have met with each other only by correspondence. A recent letter sent to each member asking for suggestions in order to present this report, brought forth from several members the fact that there might be a dearth of State Facilities for the care of Tuberculosis in children. If this condition exists the Chairman agrees with the members that something should be done about it. Time did not permit an investigation of this matter this year. It is incorporated in this report so that the incoming President, if he thinks well of it, might pass it down to the next Committee on Pediatrics.

It has been a pleasure serving on this Committee this year and for each member of the Committee I wish to congratulate you on a most successful and prosperous year for our Association.

Report of Dr. James B. Kay, Delegate from the Medical Association of Georgia to the Seventh National Conference on Rural Health

The Seventh National Conference on Rural Health, sponsored by the American Medical Association with the cooperation of the National Farm Organization, met in Denver, Colorado on February 29 and March 1st. The theme of this conference was "Help Yourself to Health."

This meeting brought together about 700 leaders in medicine, agriculture and education who are sparking rural

2,640 More Doctors

The medical population of the United States increased by 2,640 doctors during 1951 according to a report prepared by Dr. Donald G. Anderson, secretary of the American Medical Association's Council on Medical Education and Hospitals. Dr. Anderson lists the number of physicians in the continental U. S. at the end of 1951 as 211,680.

health programs throughout the country. Almost every state was represented.

Highlight of the meeting was that communities everywhere were working out programs which have the cooperation of all of the leading local professional, civic and farm organizations. An encouraging point stressed was that agricultural areas were avoiding national "handouts."

Dr. John W. Cline of San Francisco, president of the American Medical Association, said that farm health programs must go beyond efforts to attract doctors into rural areas or to provide more and better medical care to farm people.

"Americans always have believed that the individual must help himself to the limits of his capacity," Dr. Cline said. "By following this principle, and the broader concept of self-help through voluntary organizations of neighbors to help solve community problems, we have grown strong as a nation. This is the only method by which we can bring our rural health problems to adequate and satisfactory solution."

Dr. Cline praised the farmer for resisting efforts through improper legislation to rob him of the privilege of helping himself to health.

Doctors again are locating in villages, Dr. F. S. Crockett, of LaFayette, Ind., chairman of the A.M.A. Council on Rural Health, reported.

"These physicians are practicing today's medicine, due often to the cooperation of the community in making available a workshop equipped with modern diagnostic facilities," Dr. Crockett said. "Any community willing to back its ideas in this manner has qualified for a high priority in physician placement."

Some simple rules which will help a small town to get a doctor and hold him were presented by Dr. Kenneth Kaisch of Philip, S.D. His rules to obtain a doctor were: Provide adequate hospital facilties and personnel, office space and the type of a town in which a person would want to live. To hold a doctor, the rules were: Treat him as a human being and work with him instead of against him.

A medical scholarship program which is being carried out in Virginia is helping to solve the problem of getting rural doctors, according to Edgar J. Fisher, Jr. of Richmond, Va., director of the Virginia Council on Health and Medical Care.

Virginia is now providing 50 medical scholarships of $1,000 each, available to both white and Negroes, Mr. Fisher said. The recipient pledges a year of rural practice for each year the scholarship is held.

"The program is beginning to pay dividends in getting rural doctors," he said. "Within a few years 50 physicians annually will be ready to locate."

The state also has made available 74 nursing scholarships and is being asked to provide 12 graduate nursing and 10 dental scholarships as well, he said. He pointed out that the dentist shortage in rural areas is more acute than the doctor shortage.

A detailed account of how Illinois communities have helped themselves to health was presented by Dr. Harlan English of Danville, Ill., chairman of the Illinois State Medical Society's committee on rural medical service. The greatest factor in this improvement, Dr. English said, was local and county activities.

More rural "family doctors" are being provided as a result of a general practice residency training program in the University of Colorado School of Medicine, according to Dr. Charley J. Smyth of Denver, director of graduate and postgraduate medical education.

A product of that program, Dr. Henry Thode of Fort Collins, Colo., related his experience. Dr. Thode expressed the opinion that he was practicing more competent and honest medicine because of his training.

Two major changes in medical education in recent years have been an aid in solving rural health problems, it was pointed out by Robert Stearns, LL.D., of Boulder, Colo., president of the University of Colorado.

One concerns the extension of the teaching process through an entire area, and the other places emphasis on the development of the general practitioner through the establishment of a special course at the University of Colorado.

"It is impossible to expect the rural physician to take time out from his busy and vital days to come to Denver," Dr. Stearns said. "Consequently, teaching teams have gone to various sections of the state, holding sessions of lectures and demonstrations with the physicians in their own localities."

The Saturday morning session was devoted to suggestions as to what can be done to bring about improved rural health conditions. The participants were:

Mrs. Harold Wahlquist of Minneapolis, president of the Woman's Auxiliary to the American Medical Association; Beatty H. Dimit of Indiana, Pa., chairman of the National Grange's interim health committee; Ferdie Deering of Oklahoma City, editor of *Farmer-Stockman* and past president of the American Agricultural Editors Association; Mrs. J. Laning Taylor of Washington, educational director of the National Milk Producers Federation; Maurice Soults of Ames, Iowa, associate director of the Iowa State College of extension service, and Mrs. Haven Smith of Chapell, Neb., midwest regional director of the Associated Women of the American Farm Bureau Federation.

Allan B. Kline of Chicago, president of the American Farm Bureau Federation, in concluding the conference program, pointed out that the solution lay in cooperative action.

On the day prior to the conference, a meeting brought together chairmen of rural health committees and leaders in university extension services. The keynote, "The Physician as a Citizen," was sounded by Dr. Crockett, who said that self-help techniques and health education based on sound medical practice are giving rural America an equal opportunity to share in curative and preventive medicine. He stressed the doctor's role in the development of state and local health councils.

Dr. Dwight H. Murray of Napa, Cal., chairman of the A.M.A. Board of Trustees, called upon the busy rural doctor to take on the added responsibility of leadership in the rural health movement. Dr. Murray said there still was a reluctance on the part of some rural doctors to assume such leadership. He also reported a great change in the popular thinking on rural health since the council, then a committee of the A.M.A., was organized seven years ago.

Mrs. Mabel C. Mack of Corvallis, Ore., assistant director of the Oregon State College extension service, listed seven stepping stones to a successful rural health program: (1) community organization; (2) health education; (3) encouragement of use of available health facilities; (4) development of leaders; (5) health surveys; (6) understanding of the problems of families in different income levels; (7) public understanding and support.

Dr. Fred A. Humphrey of Fort Collins, Colo., regional director of the A.M.A. Council on Rural Health, said that many problems of rural health would vanish if the farmer understood the complexities of the medical profession and the doctor realized the problems of the farmers. Dr. Humphrey suggested that the health educator was best equipped to bring about such an understanding.

Your special committee on rural health for the Medical Association of Georgia held its first meeting in Macon, Ga., on April 24, 1952. This was a luncheon meeting and the following persons were present:

Mr. Aubrey Gates, Field Director of the Council on Rural Health, American Medical Association. Mr. H. L. Wingate, President Georgia Farm Bureau. Mr. Sid Wrightsman, Jr., Executive Secretary Medical Association of Georgia. Dr. C. L .Ayers, Past President of the Medical Association of Georgia and Alternate Delegate to AMA. Mr. Olin Lindsey, Field Worker, Farm Bureau of State of Georgia. Dr. J. C. Brim, member of the committee on Rural Health for the Medical Association of Georgia. Dr. Frank Vinson, General practice, Ft. Valley, Ga. Mr. Henry Williams, President of Peach County Farm Bureau. Mrs. Louise Braswell, Peach County nurse. Jas. B. Kay, chairman Committee on Rural Health for the Medical Association of Georgia.

Mr. Gates gave us some excellent ideas to work on in formulating our program for better health in rural Georgia. He stated, as Dr. John W. Cline also stated in his speech in Denver, that farm health was much more than a medical care problem. The farm health program must go beyond efforts to attract doctors into rural areas, or to provide more and better medical care to farm people. In order to have better health on the farm, we must—

In the Right Direction

According to an American Medical Association report, American hospital service last year reached an all-time high.

In 6,637 registered hospitals, 18,237,117 patients were admitted, one every 1.7 seconds.

There was also a very marked gain in extending accident and health protection among the people, as measured by the accurate yardstick of premium income. This income for accident and health insurance increased almost 28 per cent over 1950. Blue Cross, Blue Shield and similar plans reported an increase of 14 per cent. Group accident and health insurance jumped nearly 41 per cent.

1. Educate farm people concerning proper dietary habits in order to build healthy bodies and to avoid nutritional diseases.

2. Improve sanitation as an important factor in the fight against communicable diseases.

3. Immunization against such preventable diseases as small pox, diphtheria and typhoid.

4. More aggressive programs to inform farm people how they can solve their own health problems by teaching home nursing and first aid, and even better selection of clothing for their families.

5. Establishment of adequate medical, dental and hospital facilities in communities which need them and are able to support them, thereby attracting doctors to rural areas.

6. Encouragement of voluntary medical and hospital insurance programs.

Everyone present took part in a Round Table discussion of rural health in Georgia and it was the opinion of the group that your committee should try to contact rural groups such as the Farm Bureau and other civic, educational, school, veteran and church organizations of the state and try to promote the program as outlined by Dr. Gates and in this way stimulate the rural people of Georgia to help themselves to better health, and thereby make Georgia a better place in which to live and in which to rear a family. The doctors of the State of Georgia should be leaders in the return to self help as opposed to Government hand-outs.

It is the recommendation of the Special Committee on Rural Health that the proposed amendments to the By-Laws be adopted, which sets up a Rural Health Committee as a standing committee.

Report of the Advisory Council to the Woman's Auxiliary
Dr. Ralph H. Chaney, Chairman

The Advisory Council met in Macon, Georgia on May 23rd, 1951 and after a preliminary meeting, met with the Executive Board of the Auxiliary and after hearing the program outlined for the year 1951-52 approved the projects presented.

The Advisory Council believes that the Auxiliary should be complimented on the work they are carrying out and that they should be encouraged to continue to carry on their program. In order to carry on an adequate program, either the Auxiliary will have to increase their dues or the Association will have to subsidize their program to a greater extent than in the past.

The work of the Auxiliary will be later presented to you in detail by the president of that organization.

We regret the death of Dr. Steve Kenyon, a member of the Advisory Council.

PRESIDENT REAVIS: The report of the Committee on Constitution and Bylaws has been given by Dr. Callaway.

This brings us up to arguments. We are now ready to consider unfinished business. Has anyone anything to bring up under that heading?

SECRETARY POER: Mr. President, we would like to introduce a resolution to be presented by our delegates to the American Medical Association.

PRESIDENT REAVIS: That will come up under new business. Is there any unfinished business? If not, we will hear new business. Dr. Poer.

SECRETARY POER: The situation has come up from time to time with the officers of the State Association that when they attend the Annual meeting of the AMA they have no status there whatsoever. Actually, at times I understand one or more of our Past Presidents have been in session with the AMA House of Delegates when they have gone into executive session and they were invited to leave the hall.

Of course, that is a very rare occasion; but in discussing this matter with Dr. Cline and other men—after all, the program, policies and plans of the AMA as they are carried out on a state level must be handled by the officers of the state associations. Therefore, we need to be in a little closer liaison with the AMA.

I went so far as to discuss with Dr. Cline the possibility of setting up an affiliate membership or a membership of some type in the House of Delegates of the AMA, without vote, to be made up of secretaries and presidents of state societies. He thinks it is a very definite gap in our national and state setup that should be plugged.

I wish at this time to introduce a resolution to be presented by our delegates to the AMA; this is a resolution, not a petition, that such type of membership be set up in the AMA House of Delegates. That at least will set the wheels in motion, and it will enable Dr. Cline and other officers of the AMA to see what can be done about it. Perhaps nothing can be done—but at least we can start it.

I wrote this out very quickly, and I will read it to you:

Special Resolution Presented by David Henry Poer, Secretary

WHEREAS, the AMA has become the governing body for the entire profession, and

WHEREAS, The plans and policies of the AMA must be carried out in this and all other states by the officers of the state organizations, and

WHEREAS, Up to this time such officials have no active part in the deliberations of the House of Delegates of the AMA, therefore,

BE IT RESOLVED that the officials of the AMA and the members of the AMA House of Delegates seek to correct this deficiency by establishing an affiliate-delegate status which would allow participation by State Association presidents and secretaries in deliberations of the AMA House of Delegates without voting privileges and the right to hold offices.

PRESIDENT REAVIS: This resolution will be referred to Reference Committee No. 4. Thank you, Dr. Poer.

I believe there is some other business to come up under unfinished business. Dr. Chaney.

DR. CHANEY: I will take just a moment of your time because you have already heard Dr. Cline speak this afternoon in regard to medical schools throughout the country. You have all received from Dr. Reavis and Dr. Holton a letter making the suggestion that this Association make a

donation to the Medical Education Foundation, and that each member of this Association be requested to make an individual contribution.

There has been a very distinct feeling in other parts of the country that Georgia is more or less a slacker on this proposition. Dr. Allen, this afternoon, in his report, showed that the Foundation was started with a fund of $500,000 from the AMA, and then additional funds were given and that there have been amounts given from other states. South Carolina, for instance, has given $12,000 to the Foundation fund, and they have only one medical school.

Georgia, to our great honor and credit, has given less than $500, and we have received for our two medical schools, I am informed, something like $28,000 so far, and that we are already entitled to and probably will get another slice in the next redistribution ,because the AMA Education Foundation has given the money according to need, and not according to locality, and so on.

Therefore, I am offering this letter as the basis of a resolution, to be referred to the proper reference committee for action by this Association.

PRESIDENT REAVIS: I will ask Mr. Wrightsman to read this letter.

Resolution — AMEF Constitution

We are sending this letter to all members of the House of Delegates of the Medical Association of Georgia in advance of our Annual Session, so that you may have time to consider the very great need of our two medical schools for funds at this time.

On account of their present need, and since one of the purposes of our Association is "to advance the science of medicine," it is suggested that (1) the Association donate $10,000.00 and that (2) the members themselves be requested to donate $10.00 each for this purpose.

Should the House of Delegates decide to take any action in this matter, all details would be left to the Council.

Expecting to see you at the Annual Session,

We remain,

Fraternally yours,

W. F. REAVIS, President

C. F. HOLTON, President-elect

PRESIDENT REAVIS: I will refer this matter to Reference Committee No. 6.

DR. RICHARDSON: Mr. President, may I say just one word about this in substantiation of what Dr. Chaney has stated?

I felt very keenly about this matter. There have been nine contributions from the State of Georgia, totaling around $500. The State of Pennsylvania has made 1,400 individual contributions. No man in this audience paid for his medical education. We all owe something, and this is our chance to do a two-fold thing—to first pay back our debt in some measure as it was meted out to us; secondly, it is the finest way to keep the government from interfering with medical education, because when the AMA made its donation of half a million dollars in Cleveland, a year ago last December, we were right on the verge of having the government step in and subsidize medical schools.

The power to subsidize is the power to control. These would not have been free donations. If you had been in Cleveland you would have been amazed, because that very first day the AMA announced its donation of $500,000, and in less than 24 hours the fund amounted to one million dollars. It was not from doctors—it was from surgical supply houses—and even Medical Economics came in for $5,000.

When I saw that happen I thought that the medical profession was going to swing into line. When after two years the medical profession has not swung into line, and when my own State has contributed only $500, I am really ashamed.

I am not trying to make anybody feel bad, but I think we all should feel bad. For heaven's sake, let's do something about it! Let's organize a committee in every county society in this State and pay back some of the debt we owe, and protect medicine forever from federal control!

PRESIDENT REAVIS: Thank you, Dr. Richardson.

Is there anything else under unfinished business?

DR. CHARLES A. EBERHART: This is under new business, Dr. Reavis.

I know all of you are aware of the acute situation in the nursing profession and the shortage of nurses throughout the State. Those of us who work around hospitals are much more aware of it.

I brought this matter up at the Fulton County Board of Trustees meeting, and they asked me to present a resolution to the effect that the State Medical Association, although it has no official connection with the nursing profession but is very vitally interested in nursing, should know what is going on in the national nursing education program.

Most of you undoubtedly are aware of the radical changes that have been proposed and that are in the process of being carried out. These occurred in 1946. The only state nurses' association which has opposed these changes has been the Georgia State Nurses Association, headed by Miss Dana Hudson. I have made a short personal investigation of the problem, and I don't think the medical profession is going to be pleased with the ultimate results.

This covers a wide field, and it is beyond the power of any one individual to investigate it and render any opinion that would have any weight, so I propose this resolution.

Resolution on Nursing Education

WHEREAS, revolutionary and drastic changes are being introduced in the field of nursing education by the National Nursing Association which may profoundly effect the Medical Profession, and

WHEREAS, the National Nursing Association is sponsoring Federal Aid to Nursing Education;

NOW, THEREFORE, BE IT RESOLVED:

(1) That the House of Delegates of the Medical Association of Georgia appoint a Committee to investigate the State-wide effects of this change in Nursing Education upon the Hospitals and care of patients.

(2) That this Committee's findings be made known to the AMA and other Medical Societies as well as the National Nursing Association.

PRESIDENT REAVIS: Thank you, Dr. Eberhart. This will be referred to Reference Committee No. 6.

DR. TULLY T. BLALOCK: Mr. President, I have an item of new business to bring up.

According to the Bylaws, Chapter I, Section 6, pertaining to honorary members, it provides for the election of honorary members to the Medical Association of Georgia "upon the nomination by any component county medical society. Such honorary members may be issued an appropriate certificate of membership wtihout payment of dues."

Mr. President, the Fulton County Medical Society would like to propose the following members for honorary membership in the Medical Association of Georgia. I have a list here that I will be happy to read if you wish, or I will submit the names as a list. This is in accordance with the revision in the Bylaws.

PRESIDENT REAVIS: Gentlemen, I am going to rule this out of order. No resolution is necessary. If a county society votes that a man should become an honorary member, the State Association does not have to take any action on it.

DR. BLALOCK: If I may make one more comment, Mr. President, the Bylaws provide that these men be elected by the House of Delegates. If I am out of order I will not make the recommendation. It says they are to be elected by the House of Delegates upon nomination by the component county societies.

PRESIDENT REAVIS: I rescind my ruling. I am very sorry, Dr. Blalock. You are in order.

DR. CALLAWAY: Mr. President, I believe that if this life membership is approved by the House the day after tomorrow, it is going to change the entire status of these men. These men probably were intended to become life members and not honorary members.

DR. BLALOCK: No; that merely provides for men who have practiced for forty years or more, or who are seventy years old or more. The county medical societies have honorary members who do not fall within that classification

and who are not required to pay dues.

DR. CALLAWAY: I beg your pardon.

DR. BLALOCK: These men actually are not members of the Medical Association of Georgia at the present time. It is merely an oversight, and one that we wish to correct in a legal manner.

Since the Bylaws provide for the election of these as honorary members, the Fulton County Medical Society wishes to propose these men for honorary membership. There is no controversy about this. These men are honorary members of the Fulton County Medical Society and are entitled to become honorary members of the Medical Association of Georgia. They are men who have practiced in Atlanta for forty or fifty years.

PRESIDENT REAVIS: Were they duly elected by the Fulton County Medical Society?

DR. BLALOCK: Yes. They have all been members of the Fulton County Medical Society for a great many years. You know all of them.

PRESIDENT REAVIS: They have been duly elected by the County Society?

DR. BLALOCK: Yes. They have all passed through their active membership in the Society and have been duly elected as honorary members. Honorary membership in the County Medical Society entitles a man to be relieved of the necessity of paying dues.

PRESIDENT REAVIS: How long have you carried them as honorary members?

DR. BLALOCK: This has been practiced for years.

PRESIDENT REAVIS: If that is so, they are already honorary members of the Medical Association of Georgia.

DR. RICHARDSON: May I rise to a point of order, Mr. President? Under the new interpretation of the Constitution, honorary membership is conferred upon a man for some outstanding service in medicine. His age makes no difference; nor does he have to live in Fulton County. We could confer honorary membership on Dr. Leahy of Boston.

That is our new interpretation of honorary membership—not just to honor somebody, but this life membership is going to take its place, just as my friend here tried to explain just now.

DR. BLALOCK: I understand that, Dr. Richardson. As I understand it, the reason is to entitle these men to medical defense and the privilege of membership in the Medical Association of Georgia, which they do not enjoy legally.

DR. CALLAWAY: Honorary membership carries nothing but an honor.

PRESIDENT REAVIS: I am going to accept this and refer it to Reference Committee No. 6, and they can thresh it out. If these men have been carried on the rolls as honorary members of the Fulton County Medical Society previous to this year, they have automatically been carried on the roll of the Medical Association of Georgia as honorary members.

SECRETARY POER: There is a new classification. I think Fulton County is confusing life memberships and honorary memberships. If Dr. Blalock will submit a list of accomplishments, disregarding age and length of service in Fulton County of these men, which will entitle them to honorary membership in line with other outstanding men, then every one of them would have to be considered, naturally. Their accomplishments must be something beside length of service and practice in the community, and age. I am sure these men are all honored members—

DR. BLALOCK: I can assure you this was not done on the spur of the moment, but was done upon advice of counsel and upon application of these particular members. This is not the place for argument.

I would like to take issue with the fact that these men are not entitled to medical defense by the Medical Association of Georgia. If I am not mistaken, an honorary member enjoys the same privileges and rights as any other member in the Medical Association of Georgia, according to the Constitution and Bylaws.

You understand, I am not one of the men listed, so I am not arguing for myself.

PRESIDENT REAVIS: They have to be duly elected by the county society.

DR. PRUITT: Mr. President, a point of order. We are functioning under the present Constitution and Bylaws. There is a proposed amendment. We have not reached that as yet. I think Dr. Blalock is in order. Tomorrow, if the House changes the amendment, then it will be a different story. We are now and have been functioning under the Constitution and Bylaws.

PRESIDENT REAVIS: I will refer this to Reference Committee No. 6.

Is there anything else under new business?

DR. HUTTO: Mr. President, I am sorry that Muscogee County's secretary was called away a little while ago, because he knows the history behind the resolution that the Society from Columbus is asking be considered. It has to do with our action of going on record as favorably endorsing the plan for a State medical examiner system.

As a sidelight I would advise you, when you talk about it back home, to be very careful about what gets into the papers, as our present coroner is a very good one. He is a barber to about half of the doctors. The word got out that the Medical Society was against the coroner, and they forgot the system that we favored a medical man trained to be a coroner. The next day a local naturopath achieved an article on the front page saying that a doctor was now running for coroner.

We therefore present the following:

Resolution on State Medical Examiner System

WHEREAS, it is self-evident that numerous matters, pertinent to the duties of a coroner, can be properly evaluated only by a licensed Doctor of Medicine and

WHEREAS, the lack of such qualification, regardless of other virtues and accomplishments, constitutes a fundamental handicap, to the official performing this duty, and, thus, increases the danger of error and injustice to individuals or to the public,

NOW, THEREFORE, BE IT RESOLVED, that the Muscogee County Medical Society, propose to the House of Delegates, of the Medical Association of Georgia, a resolution urging it to advocate, for the state of Georgia, replacement of the present coroner system with what is known as the Medical Examiner System and otherwise to exert its efforts and influence for the betterment of this important public function.

PRESIDENT REAVIS: Thank you, Dr. Hutto. This is referred to Reference Committee No. 4.

Resolution on Section of Pathology

At the annual meeting of the Georgia Association of Pathologists on May 11, 1952, the problems of the quality and amount of laboratory coverage (including Blood Banking) available throughout the state, both for ordinary needs and for Civil Defense were considered in detail. It was concluded that despite the fine efforts of individual Doctors, the Red Cross and the State Health Department, the final solutions will depend on the integration of all private and public agencies under the leadership of the Medical Association of Georgia. The Pathologists recognized that they as a group could best discharge their duty to the public as a section of the Medical Association of Georgia.

This letter is a petition in compliance with a unanimous vote of the Pathologists present, that the members of the Georgia Association of Pathologists be accepted as a Section of Pathology (including Blood Banking) of the Medical Association of Georgia.

Is there anything else under new business? If not, we stand adjourned until eight-thirty Wednesday morning. *The meeting adojurned at 8:45 p. m.*

Wednesday Morning Session, May 14, 1952

The final session convened at 8:30 a. m., Dr. W. F. Reavis, President, presiding.

PRESIDENT REAVIS: The House will please come to order.

Our first business will be the reading of the minutes, which will consist of the reports of reference committees.

Reference Committee No. 2, Dr. Roule

We will hear from Reference Committee No. 2. Dr. Roule. I will ask the chairman of the reference committees to report paragraph by paragraph, and we will act on each paragraph and thus facilitate our business.

DR. ROULE: The Reference Committee wishes to thank Dr. Reavis for his report, and recommends the following: That the present public relations department be abolished, and that the work of this department be handled in the central office under the direction of the Secretary, with the advice of a committee in an advisory capacity. *Recommendation adopted.*

DR. ROULE: Dr. Reavis wanted an expression on when the meeting dates should be. Our Reference Committee was not too certain about what to do, but we do recommend that future annual sessions should begin on Sunday, as it did this year.

DR. J. W. CHAMBERS: We are interested in our relationships with our own communities. It seems to me it is awfully poor relations for the medical profession, who probably is next to the ministers in admiration as far as the public is concerned, to start their annual meeting—the one meeting they have in a year—on a Sunday. True, it is a day that is sacred and time is saved, but I don't believe many doctors in the State of Georgia need to save one day from their office. From a purely public relations standpoint we ought to consider that.

DR. PRUITT: I want to support Dr. Chambers. I have an idea that there are a good many who feel the same way about it.

DR. ALLEN H. BUNCE: Mr. President, I also want to support the position taken by Dr. Chambers and Dr. Pruitt.

I move that this portion of the report be referred to the Council, with power to act.

DR. FOWLER: I second that motion.

PRESIDENT REAVIS: We will vote on the motion to refer this matter to Council. I am sure that will be perfectly satisfactory with the Committee.

DR. ROULE: We simply brought it up so it could be discussed. The Committee didn't know what to recommend. *Motion by Dr. Bunce was put to a vote and was carried unanimously.*

DR. ROULE: Next, that a strong medical practice act, designating the qualifications for our own members as well as the practice of the other healing arts, is a crying need, and all efforts should be made by the appropriate committee to have such legislation passed.

I don't believe that requires any action. It is a matter that the Committee felt should be brought out here.

The Reference Committee wishes to thank Dr. R. C. McGahee, First Vice President, for his report.

The Committee thanks Dr. Henry D. Poer for his lengthy and comprehensive report, and makes the following recommendations:

1—Central Office: As long as the present needs of the Medical Association of Georgia are adequate, that the present arrangement be continued, but that a special committee be appointed to determine our future needs for housing the central office.

PRESIDENT REAVIS: I think it would be well if you worded it a little differently. It might say, "to study and report back at the next meeting of the House of Delegates." We have had a crying need for that for a long time, and I think a good, strong committee of perhaps five, to study that matter, would be a good thing.

DR. ROULE: We will accept that.

SECRETARY POER: That is agreeable. I was just looking into the future. We must anticipate 20 years from now.

PRESIDENT REAVIS It is moved and seconded that a committee of five be appointed by the incoming President to study the needs of the Association regarding housing, and to report back to the next meeting of the House of Delegates. Any discussion? *Motion carried.*

DR. ROULE: This is in reference to personnel, in which Dr. Poer requested some additional help: The Committee recommends that the Council be empowered to employ such additional secretarial help as they may deem necessary.

PRESIDENT REAVIS: That requires no motion. The Council already has that authority.

DR. ROULE: Under "Membership", the Reference Committee felt that every effort should be made to urge the young physicians to join the county medical societies so that it will become a habit, and they will continue their membership during their lifetime. We suggest that the officers of the component county societies redouble their efforts to increase their membership. The question of including liability (malpractice) insurance on a Statewide basis, possibly to be included in the annual State dues, should be considered as an incentive to increased membership.

Concerning district and county societies, the Reference Committee recommends the following:

A—That each county society should seriously consider an honorarium for their secretaries in proportion to the amount of work required.

B—That a meeting of the newly elected secretaries be held as soon after their elections as possible.

PRESIDENT REAVIS: I don't think that requires action because it has already been taken care of.

DR. ROULE: Concerning the annual session, we agree that the annual session has become big business, and that a lot of time and work is necessary in planning it. We recommend that Council determine the necessity for and provide such additional secretarial help as may be necessary. *The motion was put to a vote and was carried unanimously.*

DR. ROULE: The Secretary made a recommendation, and the Reference Committee does too, that the Journal be made available to doctors' wives, medical students, and the members of related professions and trades at a reduced rate.

PRESIDENT REAVIS: Did you set an amount?

DR. ROULE: No; we just said, "at a reduced rate".

SECRETARY POER: Half price was our suggestion.

DR. ROULE: At half the price, yes. I will add that to my motion, that doctors' wives, medical students, and members of related professions and trades get the Journal at half price.

DR. JOHN W. TURNER: As a matter of business, would that not be handled by Council, too? It would be a matter of finances.

DR. D. N. TOHMPSON: Does that apply to doctors' widows?

SECRETARY POER: Yes. We would be delighted to have doctors' widows receive the Journal.

PRESIDENT REAVIS: What would be that half price?

SECRETARY POER: $2.50. *The motion was put to a vote and was carried unanimously.*

DR. ROULE: The second part referring to the Journal is that we refer to the Council the advisability of an added secretary to assist in handling advertisements for the Journal.

PRESIDENT REAVIS: That is a matter for Council.

DR. ROULE: Concerning public relations, your Reference Committee is in accord with the Secretray that the Public Relations Committee should continue to give assistance, along with other standing committees, in an advisory capacity, under the direction of and with the full cooperation of the Executive Secretary.

That is in line with the Presdient's report, made earlier.

The subject of the American Medical Education Foundation has been assigned to another reference committee, but we recommend the full support of the central as wall as local committees by each member of the Association, this support to be in funds as well as words.

Concerning the Committee on Rural Health, the Committee recommends that Chairman J. B. Kay be complimented on the excellent start in this program, and we urge full support of the work of this Committee. Secretarial assistance and supplies should be furnished by the Association.

DR. ROULE: Concerning reports of other committees, we realize that certain committees should be abolished and new committees should be created. We suggest that a Standing Committee on Committees be appointed, whose duty it will be to recommend the discontinuance of useless committees, and the creation of such new committees as are required for the House of Delegates at each annual session.

PRESIDENT REAVIS: Council has that authority at this time.

DR. ROULE: Under Furniture and Equipment, we recom-

mend:

A—That all property of the Association be surveyed and, if unneeded, be disposed of at the best possible prices obtainable. That is handled by Council.

PRESIDENT REAVIS: That's right.

DR. ROULE: We also recommend that a new dictaphone or other sound-recording machine be purchased to meet the urgent need now existing in the cenrtal office because of an increasing staff of clerical workers, both for the sake of efficiency and economy.

PRESIDENT REAVIS: That also should be referred to Council.

DR. ROULE: We recommend also that additional cabinets be furnished to properly stock the large amount of necessary supplies and the increasing number of Journal issues, filed for permanent record.

PRESIDENT REAVIS: That also is referred to the Council.

DR. ROULE: On awards and lectureships, the Reference Committee recommends that the Awards Committee explore the possibility of securing additional awards and funds for lectureships for the annual session. *This recommendation was put to a vote, and was carried unanimously.*

PRESIDENT REAVIS: We will so instruct the Awards Committee.

DR. ROULE: The Reference Committee recommends that the Association again express its appreciation to Dr. F. P. Calhoun for his generous donation to provide the Abner W. Calhoun Lectureships.

PRESIDENT REAVIS: I will instruct the Secretary to handle that.

DR. ROULE: Concerning the Woman's Auxiliary, the Reference Committee recommends that the Woman's Auxiliary be thanked for their support of the activities of the Association, as well as for the program which they carried on during the past year. We heartily approve of an honorarium for the Auxiliary President to cover part of her traveling expenses, and we recommend this be referred to Council for action.

PRESIDENT REAVIS: Gentlemen, the matter of the Medical Association of Georgia giving money to the President of the Woman's Auxiliary should be handled by the House of Delegates. I think certainly the Council will welcome an expression from the House as to whether this should or should not be done. I think they would welcome it if you voted to do so, in any amount you want to set.

I believe this matter should be handled by the House of Delegates, because the State is much better covered by the House than it is by a few Councilors.

DR. HAL M. DAVISON: I move that we give them what they ask for. What they ask for is not what they need for traveling expenses. Certainly the Woman's Auxiliary is doing a better job than we are ourselves. I move we give them $300.

PRESIDENT REAVIS: We will defer action on this until the other reference committee reports on this matter.

DR. TURNER: Mr. President, we are sure that $250 will not cover it. The President of the Auxiliary, I understand, is supposed to make two trips to Chicago each year, in fact, both the President and the President-elect. Then, the President-elect is supposed to make one trip, and $300 would not cover what they are supposed to do in their jobs. Those are duties that they owe to the Auxiliary, and through the Auxiliary to this Association.

PRESIDENT REAVIS: We will take that up under Dr. Martin's report.

DR. ROULE: Under policies of the Association, the Refernce Committee wishes to call to your attention some of the problems listed by your Secretary as problems confronting us, and we are sure that standing committees are endeavoring to have some of these problems resolved. These problems include:

1—The nursing situation.

2—Control of the healing arts with police power for the State Board of Examiners for violations.

3—A basic science law.

4—Improved and more economical methods of treatment of the mentally ill, including establishment of screening centers in Atlanta and Augusta.

5—Increase in number of new physicians in rural areas.

6—More efficient use of medical personnel in military service to lessen number of doctors required.

7—Enforcement of a fair medical draft law.

8—Policies to be followed in the new State General Hospital in Augusta.

9—Care of chronically ill patients in the State.

Concerning the report of the delegates to the AMA, your Reference Committee read this report with much interest, and we wish to thank Drs. B. H. Minchew, Eustace A. Allen and C. H. Richardson, Sr. for their splendid work as our delegates. We are sure that if other states are as well represented by men who are hard working and as sincere in their efforts to find a solution to our problems, the future of American medicine is bright.

Our Reference Committee was given one other matter. Concerning the Georgia Society of Pathologists, we have received a petition which I will read. It is signed by all the pathologists present, who are asking "that members of the Georgia Association of Pathologists be accepted as a section of pathology, including blood banking, Section of Pathology, of the Medical Association of Georgia."

Your Committee recommends that the members of the Georgia Association of Pathologists be accepted as a section on pathology of the Medical Association of Georgia. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

DR. ROULE: This completes the report of Reference Committee No. 2.

PRESIDENT REAVIS: Thank you, Dr. Roule. Dr. Chaney.

DR. CHANEY: Mr. President, the only matter that was submitted to Reference Committee No. 1 was the report of the Committee on Professional Conduct, which should be filed in the Archives of the Association. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

PRESIDENT REAVIS: Reference Committee No. 3.

DR. CHANEY: I believe it is necessary that the report of Reference Committee No. 2 be adopted as a whole. *The motion was put to a vote and was carried unanimously.*

Reference Committee No. 3, Dr. Dillinger

PRESIDENT REAVIS: Dr. Dillinger.

DR. GEORGE R. DILLINGER: Gentlemen of the House of Delegates, your Reference Committee thoroughly studied the program of the present annual meeting, and wishes to commend and heartily approve the program developed by the Committee on Scientific Work for this meeting. We recommend the continuance of a similar program for the next annual session.

PRESIDENT REAVIS: Do you mean in regard to sectional meetings, and so on?

DR. DILLINGER: That is correct. *The motion was put to a vote and was carried unanimously.*

DR. DILLINGER: Report of the Committee on Professional Conduct: Your Reference Committee approves Section 1 of the report of the Committee on Professional Conduct, and recommends the Appointment of grievance committees in each county medical society.

DR. J. J. ARRENDALE: That would be an injustice to some of us smaller counties, as I see it. I believe we would fare much better without grievance committee in some of our smaller counties. If it is just a recommendation, of course, all I want to say is that I don't believe it will work in some of the smaller counties. It will work better in district societies.

PRESIDENT REAVIS: Dr. Arrendale's remarks are well taken. A grievance committee in a society of six or ten men (and we have quite a few of those) might give us a little trouble. I think that can be worked out with the individual counties. I see no reason why this recommendation cannot be adopted. It is not mandatory upon the county societies. It is merely a recommendation. *The motion was put to a vote and was carried unanimously.*

DR. DILLINGER: Concerning the report of the Commitee on Medical Education and Hospitals your Reference Committee recommends the approval of this report, and that

the House of Delegates instruct the officers and committees of the Medical Association of Georgia to assist in every way possible the Committee on Medical Education and Hospitals to accomplish the purpose of the three embodied resolutions.

DR. TURNER: There is one clause in there which probably should be stricken; that is the clause that says, "commensurate with the ability of the community to pay". We cannot say what salaries these men will accept after they have been approved. Do you see what I mean, Dr. Dillinger?

I think we could recommend that the University of Georgia train men to supervise these hospitals, but I don't believe we can recommend what salary they are to receive after they have graduated and are prepared to administer hospitals.

PRESIDENT REAVIS: The intent was that if we train these men it is not mandatory upon them to take any particular job, but that the men be trained in such fashion that the smaller hospitals would have these men available at a reasonable salary, without a prohibitive salary, as now exists. I think that is the intent.

DR. TURNER: Will you read that again, Dr. Dillinger?

DR. DILLINGER: "The first matter dealt with was the need for trained hospital executives who would be willing to serve as administrators of the smaller hospitals, which have been constructed under the Hill-Burton Act, and for a reasonable salary. Graduates of out-of-State courses usually expect salaries that cannot be paid by the communities in which these hospitals are located.

"As a means of supplying the need of these institutions for trained administrators, it has been resolved as follows: That the Atlanta Division of the University of Georgia be requested to undertake the training of hospital executives, who would be qualified to serve as administrators of the aforesaid hospitals, at a salary commensurate with the ability of the hospital to pay." *The motion was put to a vote and was carried unanimously.*

DR. DILLINGER: Your Reference Committee recommends the approval of the report of the Committee on Maternal Mortality, which recommends the development of suggested educational campaigns to decrease maternal death, by the Committee on Maternal Mortality working in conjunction with the Georgia Department of Health. The Committee on Maternal Mortality should request funds for this purpose from the Council. *The motion was put to a vote* and *was carried unanimously.*

DR. DILLINGER: Your Committee recommends approval of the report of the Committee on Orthopedics, and recommends that the Committee on Orthopedics be abolished until need arises for such a Committee. *The motion was put to a vote, and was carried unanimously.*

DR. DILLINGER: Your Reference Committee recommends approval of the report of the Cancer Commission of the Medical Association of Georgia. *The motion was put to a vote and was carried unanimously.*

DR. DILLINGER: Your Reference Committee recommends the approval of the report of the Committee on Pediatrics. The report states that there might be a dearth of state facilities for the care of tuberculosis in children. Your Reference Committee consulted Dr. Rufus Payne concerning this problem. Battey State Hospital does not take tuberculous children with primary tuberculosis from cities where there are existing facilities for their care.

They do take cases of tuberculous meningitis from rural areas. They do not take tuberculosis of the bone or diagnostic problems. They take all children with adult type pulmonary lesions. Forty children are under treatment at Battey State Hospital at the present time.

Your Reference Committee recommends that the Committee on Pediatrics make a survey of the existing facilities available for the care of tuberculous children and, if a great dearth of State facilities exists, that they make an interim report to the Executive Committee of the Medical Association of Georgia and report their findings to the House of Delegates at the next annual session. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

DR. DILLINGER: I move the adoption of the report as a whole.

DR. ALLEN: I second the motion. *The motion was put to a vote and was carried unanimously.*

PRESIDENT REAVIS: Thank you, Dr. Dillinger and gentlemen of the Reference Committee.

Reference Committee No. 4. Dr. Ayers.

DR. AYERS: Mr. President and Members of the House of Delegates:

On the report of the Committee on Public Policy and Legislation, offered by Dr. Spencer Kirkland, this report shows that the Committee has been very active during the past year, and that their efforts have produced better conditions for the citizenry of our State and for the medical profession.

We realize that to secure any medical legislation is a very difficult job. We wish to commend the Committee on their efforts to combat socialized medicine in any form, and agree with the report that good public relations between the laity and physicians is produced more by good services and reasonable fees by the physicians themselves than any amount of propaganda that can be put out by any public relations agency.

Practically most doctors are against socialized medicine, and we therefore think that more of the efforts of such agencies as Whitaker and Baxter should be directed to the people through the press, instead of so much literature sent out to the doctors. We commend the Committee in their efforts to secure legislation to combat quackery and all off-side cults of the healing arts. We hope the Committee will continue their efforts until a marriage law is passed that will be adequate. Many other things mentioned in the report we wish only to commend. Their activities deserve the thanks of this House of Delegates. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

DR. AYERS: On the report of the Muscogee County Medical Society regarding the duties of the coroner, this Reference Committee agrees that these duties are often inefficient, but as to the substitute offered, namely, the medical examiner system, we are not sufficiently familiar with it to offer any comments. There was no name signed to the resolution, and if someone from Muscogee County will explain it properly the House can take some action.

DR. HUTTO: Muscogee County received a communication (I thought it was from the State headquarters) urging consideration and a favorable expression in an effort to get the ball rolling to have a state-controlled system of medical examiners. I suppose it would be patterned after the relatively famous and well known medical examiner system in New York City, which has functioned with the police very commendably for many years.

There is also an effort to take medical functions out of politics. As such, the Muscogee County Society endorsed the idea and presented the resolution to the State Society through the House of Delegates.

DR. CALLAWAY: I think this is very important, and probably should go to the Committee on Legislation. Georgia is the easiest place in the world to commit murder. All you have to do is to thinly screen it, call the coroner, and he is usually a retired man, and senile, and he calls up three or four of his drunken friends and they say, "He died from natural causes," and the case is closed. It is really a horrible situation.

I have no doubt that within my experience six or eight people have been murdered and the coroner's jury has glossed it over and made no investigation. I was suspicious of it, but I couldn't get any action from them at all because the coroner's jury, when they hand down a statement that a man died from natural causes, just about shuts up the matter. I think the Medical Association of Georgia should take some serious cognizance of this.

I would like to offer as a substitute motion that this resolution be adopted and recommended to the Committee on Public Policy and Legislation, for further action, at the next meeting of the legislature.

DR. AYERS: I will accept that.

DR. DILLINGER: I will second that motion.

DR. NORRIS: Mr. President, this is one of the most important things that could possibly come before the doctors in this state. What Dr. Callaway has said about our present system of medical and legal matters in this State is very mild indeed.

The Committee on Public Policy and Legislation is well aware of the situation. We are well aware of what we are up against here in Fulton County, the most populous county in the State; but we are up against a problem that has got to be handled at the grass roots level. You have got to get rid of the coroner in your county, and begin by getting a first-class physician to take over those duties.

When we get enough doctors to act as coroners in the State, we will eventually get things into medical hands. When you run up against the average coroner in the average county you run up against the most potent politician you have ever seen.

DR. JOHN L. ELLIOTT: I would like to emphasize what has just been said. In Savannah for a long time we have elected a physician as coroner. I have served as coroner for a number of years. I am not coroner at present, but the duties are rather arduous at times, and it is often rather difficult even for a good medical examiner, with the advantages of autopsy and necropsy and all that sort of thing, to really do the job the coroner is supposed to do. How anyone could propose to do it without a medical examiner is beyond my comprehension.

DR. BLALOCK: This problem has been one of the primary forces behind the League of Women Voters in this County in particular.

I would like to move that the action of this Association be communicated to the League of Women Voters of the State of Georgia, by letter, in order that they may be informed of the stand the Medical Association of Georgia is taking in this matter.

DR. STONER (Savannah): I would like to say that if this medical examiner system is not backed up by adequate crime laboratories available to the entire State, they won't be doing much better than the present system.

DR. C. ROY WILLIAMS: I feel our County is adequately covered as far as this crime laboratory question is concerned. It happens that in March the American Academy of Forensic Sciences met here in this hotel, and we had men from all over the country present, also from China, India, Mexico and Canada.

The America Academy of Forensic Sciences is recognized by the American Medical Association, and they have stimulated interest all over the country. It just happened that I was interested in some particular papers at that meeting, and so I attended. I have been able to do a little good in my own County in this same direction, and it has worked out very nicely with the State crime laboratory. We have had four cases since March on which they have helped us.

I should like to recommend that we communicate with the American Academy of Forensic Sciences and have some liaison between that organization and our Association.

PRESIDENT REAVIS: I think everybody is familiar with this matter, and the recommndation that this be referred to the Committee on Public Policy and Legislation is well taken. I will call for the vote. *The motion was put to a vote and was carried unanimously.*

DR. AYERS: On the resolution of our Secretary, Dr. Poer, requesting that the House of Delegates of the AMA allow participation by state presidents and secretaries in the deliberations of the AMA House of Delegates, without voting privileges or the right to hold office, this Committee wishes to make the following comment:

The House of Delegates of the AMA now consists of approximately 200 delegates. To add to this body a president and secretary for each state and territory constituting the AMA would mean about 100 more in attendance, if all were present. This, we think, would result in prolonging discussions and a duplication of what the regular delegates had already presented, and later on this might add to the already heavy budgets of most state associations.

Therefore, on account of the above stated facts, this Reference Committee does not believe the resolution would be advisable.

I move the adoption of this part of the report.

DR. DILLINGER: I second the motion.

DR. CALLAWAY: The state officers have to carry out the AMA's policies. I personally got run out of an AMA meeting when they were talking about something that was very important to the Medical Association of Georgia, and I could not get the information published in the Journal until it was almost too late to do anything about it.

It may need a little change to state that they have the right to sit in at all times, or that they be affiliate delegates, but certainly the presidents and secretaries of the state associations should not be barred from a meeting of the House of Delegates of the AMA as they have been barred in times passed. They have been cleared out and have not been allowed to stay to listen.

I am opposed to the Committee's recommendation that this resolution not be sent to the AMA. I don't think the AMA is going to give them the right to talk. The right we want is the right to sit in the meeting. I think the president of a state association should have that right.

SECRETARY POER: I discussed this with Dr. Cline, and he was very strongly in favor of action of this type, and he plans to institute something of that sort on his own; but he felt that if a resolution or petition came from the Medical Association of Georgia it would set the ball rolling.

Dr. Callaway is not the only President of the Medical Association of Georgia who has been asked to step out of a session of the House of Delegates of the AMA. I attended one of the meetings since I was elected Secretary, and I feel very strongly that if we are to carry out the program of the AMA we ought to know something about it.

Just to go to an AMA meeting and be present, without any feeling that you are a part of it—well, there are a lot of other places to which you can go and have a lot more fun, I can assure you.

I feel very strongly that if we are to maintain a close liaison with the AMA and its plans and policies, on a state level, some method should be worked out. I believe we will have the sympathetic attention of the officials of the AMA, and we merely introduce this resolution to put the thing into motion.

DR. ALLEN: I too have been asked to leave the House of Delegates of the AMA; that was before I was a delegate, when I was serving for Dr. Ed Greene. It is an executive session. It is a policy of the House of Delegates of the AMA, and is nothing that would be of any value to the county or state associations. The House of Delegates asks that the officers attend the meetings. I have been in the House of Delegates of the AMA twice as a delgate from Georgia. During that time they have never gone into executive session and no one was asked to leave.

At Los Angeles our Executive Secretary stayed with us almost all the time, and sat with us. Anyone who wishes to sit in the House of Delegates of the AMA is welcome. The speeches are somewhat like Dr. Robbins said last night—much longer than the seats upon which one sits. To enter into a discussion, with the amount of work they have to do, would require a great deal of time and would delay progress.

We have our reference committees, as you have here. If there is any question that anyone desires to discuss, he can go to the reference committee, as members do here in Georgia. If it is not settled it can then be brought before the House of Delegates, and he can go on the floor of the House and discuss it and fight for it.

DR. RICHARDSON: I would like to say that it might be worthwhile to have Dr. Bunce's reaction to this question. He has been in the House of Delegates much longer than we have been. I have been in the House for three years, and I have never seen an occasion when the secretaries or visitors were asked to leave. Of course, in an executive session everybody leaves except the actual delegates. It is the rarest thing to have an executive session, and all visitors are welcome to sit in at any time.

The question just occurred to us: Would it be asking too much of the AMA to enlarge its group to the extent that it would become a bit unwieldy? I would like to hear from Dr. Bunce about this, because he knows a great deal more about it than we do.

DR. BUNCE: I think this was caused largely by some mistakes made a few years ago. When Dr. Cline was here the other day he said he made a mistake in asking some of the officers of the state associations to leave the House of Delegates. He admitted he made the motion.

The meetings of the House of Delegates are open to all members of the AMA. Those people are excluded when they

have before the House a question of politics, when discussion is hot and heavy. Any committee of this Association, also the Council of this Association, has the right to attend the executive session under Robert's Rules of Order.

Dr. Clark was Chairman of the Committee on Constitution and Bylaws. He made it a rule to invite members to come in and present their points of view, and after they went in, a committee of three went to the executive session and considered the matter.

I don't think any association can get along without having the right to go into executive session if they feel it is necessary; then, of course, those who are not actually members must leave. Remember, we are represented in proportion to the number of our members, just exactly as any other association is, and we have the right to speak in that executive session through our duly elected representatives.

I think our Reference Committee mentioned that the biggest trouble would be that there would be so many people. If you enlarge the number of people allowed to speak at the AMA House of Delegates, they would be there for a month. I sympathize with Dr. Callaway and Dr. Greene. I happened to be on the Board of Trustees and not in the House at that time. I didn't have any authority in the House. I happened to be an ex officio member, but I would have to support Dr. Ayers' recommendation.

DR. AYERS: I would like to explain why the Reference Committee took this attitude. Some three or four years ago it was my pleasure to attend an AMA meeting at Cleveland, not as a delegate but as a member of the AMA. While I was there Dr. Bunce and Dr. Minchew and Dr. Weaver were there. I was with those three men practically all the time I was in Cleveland. I attended every meeting of the House, and I occupied a front seat. The only session anyone was asked not to attend was the executive session.

The Reference Committee felt that as they have all those rights already, it would just make it a fairly top-heavy meeting to dump in 100 or more people unnecessarily.

PRESIDENT REAVIS: I will call for the vote. *The motion was put to a vote and was carried unanimously.*

DR. AYERS: This concludes the report of Reference Committee No. 4. I move the adoption of the report as a whole. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

PRESIDENT REAVIS: Dr. Ayers, we thank you and your Committee.

Reference Committee No. 5
Dr. J. D. Martin, Chairman

DR. J. D. MARTIN: Mr. President, it is moved by Reference Committee No. 5 that the Medical Association of Georgia express to the Committee of the Better Health Council of Georgia their wholehearted support and thanks for a most worthwhile enterprise, and we feel that this program merits our continued cooperation.

SECRETARY POER: Financial cooperation?

DR. MARTIN: They didn't ask for any financial cooperation. I move the adoption of this part of the report. *The motion was duly seconded, and was put to a vote, and was carried unanimously.*

DR. MARTIN: It is moved that the excellent report of the President of the Woman's Auxiliary to the Medical Association of Georgia be accepted.

We would like to take this opportunity of expressing our thank for the tremendous amount of work which has been done.

In view of the expenses incurred in traveling to the various meetings, it is moved that the Medical Association of Georgia contribute $250 toward defraying the expenses of the President and President-elect of the Woman's Auxiliary.

It is further moved that the Medical Association of Georgia continue to financially support the publication of the Woman's Auxiliary to the Medical Association of Georgia.

I move the adoption of this part of the report. *The motion was put to a vote and was carried unanimously.*

DR. MARTIN: The report of the Committee on Public Health has been referred to in the report of Reference Committee No. 1. This report also has referred to Reference Committee No. 5.

It is recommended by the Reference Committee that the House of Delegates accept this comprehensive report. It is furhter recommended that the Committee on Constitution and Bylaws be advised to make the necessary changes to have the Rural Health Committee made a permanent Committee.

I move the adoption of this part of the report.

PRESIDENT REAVIS: I don't think we could make them a permanent Committee, although it is an excellent idea. I would like that to be changed to read "continuing Committee" rather than "permanent" Committee.

I don't think we could pass at this time on a permanent Committee, because that Committee might not function for two or three years and you might want to abolish it.

DR. MARTIN: We will accept your suggestion. *The motion was put to a vote and was carried unanimously.*

DR. MARTIN: Concerning the report of the Insurance and Economics Committee, it is recommended that this report be accepted as one of the real accomplishments of the year. The work done by this Committee has been tremendous, and it is felt that this is a tangible means of combatting the socialization of medicine.

Therefore, it is recommended that the President-elect be instructed to establish an advisory board to the Committee on Insurance and Economics, for the purpose of acting as a liaison between the physicians and laymen.

In regard to further use of funds for investigating insurance contracts, it is recommended that this be referred to Council with power to act.

I move adoption of this portion of the report.

PRESIDENT REAVIS: As President of your Association I wish to commend the Insurance Committee for the wonderful and extensive work they have done for us this year. I think we should give them a very hearty rising vote of thanks. (The audience arose and applauded). *The motion was put to a vote and was carried unanimously.*

DR. MARTIN: This concludes the report of Reference Committee No. 5. I move the adoption of the report as a whole. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

Report of Reference Committee No. 6
Dr. W. L. Pomeroy, Chairman

PRESIDENT REAVIS: Report of Reference Committee No. 6. Dr. W. L. Pomeroy.

DR. POMEROY: This is the report of Reference Committee No. 6. The first matter that we were asked to consider was the proposed amendment to the Bylaws of the Medical Association of Georgia. This comes under the Constitution and Bylaws.

DR. POMEROY: I move the adoption of this section of the report.

DR. ELLIOTT: I second that motion.

DR. NORRIS: Regardless of what we say or do here today, this is a very far-reaching and revolutionary move on the part of the Medical Association of Georgia. I know the delegates here represent all the component county societies, but have all the county societies, through their delegates, instructed those delegates to come here with power to vote on this?

PRESIDENT REAVIS: They were asked to send a committee, which a majority of them did, and this matter was discussed Sunday morning with the committee. Every county society in the State had an opportunity to be represented.

DR. HOLTON: Most of them held special meetings on that matter before they ever came to Atlanta.

DR. NORRIS: We certainly didn't do that. I wonder if county societies sometimes don't do things in their counties and at their meetings that they don't want to authorize their delegates to do here. I want to be sure that every county society and every man in every county society knows what we are doing here today.

PRESIDENT REAVIS: I can reasonably assure you that the membership of the Medical Association of Georgia knows what the House of Delegates is voting on today.

DR. NORRIS: I am sure Fulton County Medical Society has not brought this to the attention of the County members.

DR. TURNER: In order to assure Dr. Norris, membership is still on a county level.

DR. NORRIS: I grant that, but I wonder if I have made

myself clear. I don't think this has ever been brought before the Fulton County Medical Society. We have several hundred members. I don't think the members in Fulton County have ever discussed this. If the largest Society in the State has not had that privilege, what about some of these other counties?

I will vote with the majority on anything. I am a majority man—but I just wonder if everybody in the State knows what we are doing here today.

PRESIDENT REAVIS: Dr. Norris, as far as it was possible to do so, every county society in the State should have known it because the secretary of every county society received a notice from the central office.

SECRETARY POER: That is correct. Fulton County Medical Society was represented there on Sunday morning by the Secretary, Dr. Blalock.

PRESIDENT REAVIS: We are trying to solve a problem that has to be solved one way or another.

DR. NORRIS: Have all the doctors in the State of Georgia and all the component medical societies, on their home ground, been informed of what we are doing here today?

PRESIDENT REAVIS: Dr. Williams, from Cordele, your County Society knew it, didn't they?

DR. WILLIAMS: Yes.

DR. FULLER: Richmond County had a special meeting in order to vote on it.

PRESIDENT REAVIS: Chatham County had a special meeting, and so did Ware County. I am trying to show you that every county society knew it.

DR. NORRIS: You are the last man in the world who would do that; but I just don't want to see something come up here that in a couple of weeks will have a reverberation that will almost break up this organization because the doctors didn't know what was going on here today. Let's be sure every county medical society knows what is going on. I am not against this matter, but I am against something the doctors don't know about.

DR. RICHARDSON: We have to settle this matter. I would like to say again that Bibb County Medical Society received a communication that was sent to all the secretaries of all the county societies in the State. We had a meeting, and we have already passed this resolution. Why have we done it? For two reasons:

We are getting a large amount of Hill-Burton money for regional hospitals. In order to get that money we have got to provide a place in the hospital for a Negro physician to treat a patient. We have already gone ahead and made those plans. We have talked to the Negro physicians and they are perfectly satisfied with the arrangement.

The leader of the Negro medical society in Macon said to me the other day, "We realize we are living in the South. We want two things: We want the privilege of practicing in your hospitals, and we want the privilege of belonging to the AMA. We are asking you to make that possible for us."

Well, I was instrumental in bringing that matter to the attention of the Bibb County Medical Society. I don't think we had one dissenting vote. Every man there—and there was complete represenation—voted in favor of just such a resolution as you are passing today.

For heaven's sake, let's get through with this thing today. All you are doing is making it possible at a county level—at the grass roots level, Jack—for the counties to take in Negro physicians in a special classification of membership if they so desire. You are giving them that privilege. You are not forcing them to do it.

To say that that sort of thing is going to happen in Georgia—well, I just don't believe it. It doesn't make sense. Let's settle this thing today. We have to settle it some time; let's do it now. Let's not turn it back for another year.

PRESIDENT REAVIS: Dr. Holton and Dr. Phillips will count the hands on this vote.

Those in favor of the motion that has been discussed, to accept the Negro doctor as a scientific member, with the privilege of attending the scientific session, and not to pay county or State dues, but with the privilege of making application for AMA membership, with payment of AMA dues, hold up your hands. Is that clear?

DR. DILLINGER: Many delegates have been instructed on this. I move that we have a roll call vote.

Drugs Replaced in "Quake"

Eli Lilly and Company, Indianapolis pharmaceutical and biological manufacturer, has announced today that Lilly products destroyed in California earthquakes will be replaced without cost to hospitals and retail pharmacists. It is an odd coincidence that the Lilly replacement policy was set up after another California disaster, that of 1906 in San Francisco.

The Lilly representatives inthe Tehachapi vicinity are making the replacement of damaged Lilly stock their first order of business.

PRESIDENT REAVIS: I think a hand vote is just as good, gentlemen. Those in favor of the amendment, hold up your hand.

Gentlemen, the amendment is passed.

DR. NORRIS: May I arise to a point of order, just to make a statement? My vote against this resolution was based upon the fact that, as far as I know, Fulton County Medical Society delegates have not been instructed to vote for or against this motion.

DR. POMEROY: The Reference Committee's report still concerns the report of the Committee on Constitution and Bylaws. In considering the adoption of the change in Section 7 in regard to life membership, and on the introduction of the names of many physicians by the Fulton County Medical Society for honorary membership, the Committee realized that in order to clarify and do justice to everyone concerned, certain changes were necessary in regard to the whole membership classification as set forth in Chapter I of the Bylaws of the Association.

We therefore recommend the following changes in the Bylaws of the Association:

Chapter I(2), Section 5. Associate Member: The Reference Committee recommends that we delete that part of the last sentence, "or be eligible for medical defense". The reason for the Committee's recommendation is that we felt the associate members who can be residents, interns, service men in the armed forces, and retired physicians, were certainly entitled to medical defense if their component medical society decided they could do that.

I move adoption of that part of the report. *The motion was duly seconded, was put to a vote and was carried unanimously.*

DR. POMEROY: Section 6. Honorary Members: Add the following: ". . . upon nomination by any component medical society and approval of the Committee on Professional Conduct of the Medical Association of Georgia."

We move that this be adopted. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

DR. POMEROY: Section 7: Add, ". . . or has passed his seventieth birthday." We move that this be adopted.

This is how it reads at the present time: "A life membership may be granted by the House of Delegates, upon the recommendation of the component county society, to any physician who has had not less than forty years of active membership in the Association." The Reference Committee recommends and I move the addition of the words, "or who has passed his seventieth birthday".

DR. HUTTO: I will second that. *The motion was put to a vote and was carried unanimously.*

DR. POMEROY: We further recommend changes in the Constitution and by Bylaws as made by the Committee on Constitution and Bylaws and published in the Journal of the Medical Association of Georgia.

I so move. *The motion was duly seconded.*

DR. HOLTON: Does that include the Speaker of the House of Delegates?

DR. POMEROY: It does; it includes the election of the Speaker of the House of Delegates.

DR. HOLTON: I think that ought to be explained to the House, because I am sure a lot of them haven't read it.

DR. POMEROY: I have it right here. It is Chapter III, Section 4:

"The House of Delegates shall be presided over by a Speaker, or a Speaker pro tem, whose election shall be the first order of business at the opening session. In the absense of both, a delegate agreeable to it may preside." *The motion was put to a vote and was carried unanimously.*

DR. POMEROY: Dr. Blalock presented a list of names of members of the Fulton County Medical Society as honorary members. We discussed the matter with him and asked him to withdraw those names as honorary members, and to resubmit the names later after the proper classification is made. Dr. Blalock very kindly did so, and we appreciate it. We do not vote on them.

DR. CALLAWAY: The House of Delegates presents them?

DR. POMEROY: They have not been presented. He withdrew them.

The next matter is a resolution on nursing education, presented to the House of Delegates by Dr. Eberhart, of the Fulton County Medical Society:

"WHEREAS, revolutionary and drastic national changes are being introduced in the field of nursing education and by the Nursing Association which may profoundly affect the medical profession, and

"WHEREAS, the National Nursing Association is sponsoring federal aid to nursing education; now, therefore, be it

"RESOLVED: That the House of Delegates of the Medical Association of Georgia appoint a committee to investigate the Statewide effects of this change of nursing education upon the hospitals and care of the patients, and that this committee's findings be made known to the AMA and other medical societies, as well as the National Nursing Association."

We recommend the following change: In general we approve the general resolution, but recommend that the committee's findings be presented to the Council of the Medical Association of Georgia for study, before presentation to any other group. We thought that would be a wise precaution. I move the adoption of that.

DR. J. L. ELLIOTT: I second the motion. *The motion was put to a vote and was carried unanimously.*

DR. POMEROY: The next matter concerns the proposed donation by the Medical Association of Georgia of $10,000, and the request that each member be asked to contribute $10 to the AMA Educational Fund.

We heartily approve of this proposal, and add the following suggestions:

1—That each county society be requested to appoint a committee to canvass and secure each individual member's donation to this fund.

2—That it be called to the attention of each individual that his personal donation of $10 or more can be designated for the benefit of the medical school of his choice.

3—Furthermore, we suggest that some donation of this sort be made annually, as long as the need exists.

I move the adoption of this. *The motion was duly seconded.*

DR. NORRIS: I would like to have that clarified. Does the motion embrace the fact that we are recommending that the Medical Association of Georgia give $10,000, plus each member giving $10?

DR. POMEROY: That he will be asked to give it.

PRESIDENT REAVIS: It is a voluntary contribution from the membership.

DR. NORRIS: But the $10,000 will come out of the kitty that we have already saved for this year?

PRESIDENT REAVIS: Yes. *The motion was put to a vote and was carried, with one dissenting vote.*

DR. POMEROY: The report of the Committee on Public Relations was a very lengthy and comprehensive report. We endorse it and commend the Committee on Public Relations for their excellent work, and approve of the suggestions made in their comprehensive report.

We also urgently recommend that since public relations and the service insurance plan of the Association, known as the Georgia Plan, are so intimately associated with each other, that an experienced lay person, acting under the supervision of the Executive Secretary of the Association, be employed to handle these two important items for the ultimate benefit of the citizens of the State of Georgia and the medical profession. I move the adoption of this part of the report.

DR. WOOD: I second that motion. *The motion was put to a vote and was carried unanimously.*

DR. POMEROY: The next matter concerns the report of the Military Affairs Committee, which I don't believe was read to the House of Delegates. Shall I read it, Mr. President?

PRESIDENT REAVIS: I think we can take the Committee's recommendation.

SECRETARY POER: All this will be published in the Journal.

DR. POMEROY: We move the adoption of the report, and commend the good work of this Committee. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

DR. POMEROY: Mr. President, I move the adoption of the report of Reference Committee No. 6 as a whole.

DR. HUTTO: Second the motion. *The motion was put to a vote and was carried unanimously.*

PRESIDENT REAVIS: I wish to thank the six reference committees for their excellent work this year. They have saved us two days of hard work and long discussion in the House.

DR. HOLTON: Gentlemen, I would like a show of hands as to whether you favor a Sunday meeting of the House, such as we had this year. It seems to me the majority are in favor of a Sunday meeting. Thank you.

PRESIDENT REAVIS: Have we any other unfinished business, Mr. Secretary?

SECRETARY POER: None that I know of.

DR. BLALOCK: This comes up under unfinished business, Mr. President.

I would like to move that the House of Delegates approve the submission of the list of names from the Fulton County Medical Society, and that the Secretary be directed to enter those names either as associates or life members, depending upon which classification they come under.

SECRETARY POER: I second the motion. *The motion was put to a vote and was carried unanimously.*

DR. RICHARDSON, JR.: I think I understand why Dr. Blalock is bringing this up. It is to cover some members for this year who are not paying dues and who retain their membership in the Medical Association of Georgia. In that way it really ought to apply to all county medical societies, who should have the same opportunity. Is there any way that we can handle that?

DR. RICHARDSON, SR.: Isn't this autmoatic? Don't you have the privilege anyhow?

PRESIDENT REAVIS: Yes, but the House of Delegates has to approve it. This is a new procedure. It is a change that ought to be made next year, in my opinion. I think local societies should decide whether a man is to be a life member or something else.

DR. J. L. ELLIOTT: I think every county society in the State is in the same position. We in Chatham County have at least three or four such men, and we ought to get them in for the sake of this disability insurance. I have been laboring under the misapprehension that when we elected them and notified the State Association, it was more or less automatic; but it seems it is not.

PRESIDENT REAVIS: I will ask Dr. Blalock if he will change his motion to include the whole state, and authorize the Council to certify their names.

DR. BLALOCK: That is perfectly all right. I will move that the Secretary be instructed, upon receipt of the names from each component society, to submit them for approval by Council.

PRESIDENT REAVIS: The House of Delegates can give Council that authority. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

PRESIDENT REAVIS: Is there any other unfinished business?

DR. NORRIS: Under unfinished business, we have two

men who have long been active in the Medical Association of Georgia, in the Council and the House and every other way. I am sorry that both of these men are not enjoying good health. They are restricted in their activities. They can't get outside. One of them is in a very serious condition. I refer to Dr. Shanks, our former Secretary, and Dr. Edgar Hill Greene, a former President.

I should like to make a motion that Dr. Reavis, as President and presiding officer of the House of Delegates, write a letter to them expressing our sympathy and telling them how sorry we are that they could not be here. *The motion was duly seconded, was put to a vote, and was carried unanimously.*

PRESIDENT REAVIS: I will instruct the Secretary to handle that matter, and I assure you we will draw up a proper letter and send it to these two noble men.

Is there any other unfinished business?

DR. SCHAEFER: May we have approval of Council on the raise in dues? Didn't we get that $25 a couple of years ago?

PRESIDENT REAVIS: The Council has authorized a raise in dues up to a certain sum. It is limited.

Is there any other unfinished business? Is there any new business?

DR. EBERHART: I want to discuss a matter for about five minutes, and I am sorry I didn't bring it up at the first session so that it could have been referred to a reference committee, but I rather got snafued on it.

I have at hand a letter from the National Doctors Committee for Improved Medical Services. This is an affiliate Committee for Improved Medical Services. This is an affiliate Committee of the Citizens Committee for the Hoover Report.

A few physicians are interested in and have been trying to get hearings on Senate Bill 1140. It was largely through the efforts of this committee that this bill was brought before the Senate, and the hearings very recently have been completed.

There was some divergence of opinion between this committee and the AMA, and the resolution that I propose this morning is merely a resolution to the AMA, to urge them to iron out their differences so that action can be taken on this important matter, which resolves itself around the Hoover Report asking for the establishment of a department of health and the coordinated—

PRESIDENT REAVIS: Gentlemen, I am going to have to rule this out of order. This matter should have been brought up the other day.

I will entertain a motion from Dr. Eberhart, that this matter be referred to Council for study, since we have not had a chance to study it. I don't think it is right to bring it up now.

DR. HUTTO: Study and action.

DR. EBERHART: I haven't even read what I was going to read.

PRESIDENT REAVIS: You are going to present a resolution. A resolution brought up at this time is out of order. It should have been brought up at the first meeting of the House of Delegates. If you refer it to the Council for action, they will have a chance to study it.

DR. EBERHART: The importance of this matter is that some action can be taken on this resolution at the June meeting of the AMA. That is the reason why I bring it up at this time.

SECRETARY POER: The House of Delegates won't take any action this morning unless they have a chance to study it. They cannot vote on it today.

PRESIDENT REAVIS: I am sorry, Dr. Eberhart. This matter will be referred to Council. That is the only way to handle it. They can take it up in detail.

DR. WILLIAM R. DANCY: Mr. President, we just passed a resolution to send a letter of greetings to Dr. Shanks and Dr. Greene. With your permission I should like to add the name of Dr. Minchew. He has been very active in this organization. He is a Past President, and he was a delegate to the AMA. He has not been able to come to this meeting, and is curtailing his activities.

PRESIDENT REAVIS: I will accept that without a motion, Doctor. We will send him greetings, too.

Is there anything else under new business? If not, I will entertain a motion to thank the Atlanta doctors for their wonderful hospitality as grass roots boys in Atlanta this year.

DR. HOLTON: I so move.

DR. DILLINGER: I second it. *The motion was put to a vote and was carried unanimously.*

DR. NORRIS: I move we adjourn.

(The motion was duly seconded, was put to a vote, and was carried unanimously, and the meeting adjourned sine die at 10:30 a.m.)

PRESS COMMENT: *A Dishonest Bill*

Congress recently voted down a social security bill which would have increased old age benefits. A House leader charged that a "pressure campaign" conducted by the American Medical Association was responsible.

This was at once answered by the association's president, who said, "In all likelihood the increase in old age benefits would have been voted without serious opposition, if the sponsors of the legislation had presented an honest bill to achieve that purpose. Such legislation certainly would not have been opposed by the American Medical Association, and will not be opposed by the AMA at any time that it is honestly presented.

"The defeat of the bill . . . was due to the fact that its sponsors sought to trick their fellow Congressmen by a hidden section in the act, designed to establish a legal basis on which the Federal Security Administrator could begin to exercise political control over the care of the sick and the practice of medicine . . . The bill was defeated not by AMA, but by the aroused members of Congress who had discovered the duplicity of the legislation's sponsors."

The sponsors tried to slip in a joker clause which would have started us along the road to socialized medicine or government-bossed medicine. The advocates of that haven't been able to get to first base by direct, forthright methods. Congress is overwhelmingly opposed to turning the practice of medicine over to the tender mercies of the bureaucrats and machine politicians. So now they are trying deception. In this instance, the elderly people who receive social security checks were the victims.

—Rome News Tribune

News and Information

SPECIAL NOTE

Those members of the Association who desire to present papers at The 1953 Annual Session must submit titles before *November 10, 1952*. Please mail this information to: Chairman, Committee on Scientific Work, Medical Association of Georgia, 875 W. Peachtree St., N. E., Atlanta.

—Thomas L. Ross, M.D.

The One Hundred Third Annual Session of the Medical Association of Georgia for 1953 will be held May 10-13 at the DeSoto Hotel, Headquarters, in Savannah. Members are advised to make their reservations early as hotel space is limited.

The first meeting of the Committee on Scientific Work (Program) was held in Savannah August 9. Plans are going ahead for the next meeting of the Association.

General and Section meetings will be held as in 1952 and suggestions from members are invited if sent in promptly. Specialty societies plan to participate again and several distinguished guest speakers have been invited. AMA President Bauer has already accepted the Association's invitation to appear on the program.

ANNOUNCEMENTS

The seventeenth annual assembly of the United States and Canadian chapters of the International College of Surgeons will be held in the Conrad Hilton hotel, Chicago, September 2-5. Feature speakers on the program are Lord Thomas Horder, G.C.V.O., M.D., F.R.C.P., F.R.C.S., extra physician to Queen Elizabeth, chairman of for the fellowship for Freedom in Medicine, and member of the Council of the British Medical Association and another outstanding surgeon, Mr. Arthur Dickson Wright, F.R.C.S., member of the Council of the Royal College of Surgeons. Other noted speakers will deliver papers.

The Tri-State Obstetric Seminar annually sponsored by the Bureaus of Maternal and Child Welfare of the Georgia, Florida and South Carolina State Health Departments will be held at the Sheraton Palza Hotel, Daytona Beach, Florida, September 8, 9 and 10 inclusive. Lecturers will include: Dr. R. Gordon Douglas, New York Hospital; Dr. Carl P. Huber, Indiana University; Dr. William J. Diechman, Chicago Lying-In Hospital; Dr. F. Bayard Carter, Duke University; Dr. Edith L. Potter, Chicago Lying-In Hospital; Dr. Fred L. Adair, University of Chicago; Dr. Clement A. Smith, Boston Children's Hospital; Dr. Warren W. Quillian, Miami Jackson Memorial Hospital; and Dr. John Adriani, Louisiana State University and Tulane University.

The Nineteenth Annual Venereal Disease Postgraduate course at the U. S. Public Health Service Medical Center, Hot Springs, Arkansas is scheduled for September 5-19. Presentations will cover fundamentals and new advances in VD control in a short concentrated review. There will be no fee for this instruction. Applications should be sent to: Dr. Edgar B. Johnwick, Medical Director, USPHS Medical Center, Hot Springs National Park, Arkansas.

The Fourth Annual Meeting of the Georgia Heart Association will convene September 12-13, at the General Oglethorpe Hotel in Savannah. Scientific sessions are scheduled for Friday, September 12 to begin at 1:00 p.m. These sessions will continue throughout the day, Saturday, September 13. Guest speakers presenting papers include: Dr. Edward F. Bland, Massachusetts General Hospital; Dr. Irvine H. Page, Cleveland Clinic Foundation; Dr. A. Wilbur Duryee, New York University; Dr. Robert R. McMillan, Bowman Gray School of Medicine, Wake Forest; and Dr. Franklin D. Johnston, University of Michigan Medical School. There is no registration fee for this meeting.

SOCIETIES

Third District Medical Society held their regular meeting in honor of Dr. John T. Arnold. Members of the society travelled to Parrott, Dr. Arnold's home town to convene. In the Parrott community school house, Dr. Francis Martin, of Shellman, president of the Terrell-Randolph Medical Society paid tribute to the 77-year-old doctor who has practiced medicine for 52 years. Dr. Schley Gatewood, of Americus, president of the Third District Medical Society, presided at the business meeting. On the program were Dr. C. W. Henderson, of Columbus; Dr. Richard Blumberg, of Atlanta; Dr. Byron Hoffman, of Atlanta; Dr. Robert, of Atlanta; Drs. Robert Martin and J. C. Patterson, of Cuthbert; and Drs. Elisha Cain, Franklin Edwards, Willis Jordan, and John Stapleton, all of Columbus.

Sixth District Medical Society in its summer meeting June 26 met in Milledgeville with the Milledgeville State Hospital staff in charge of the society's scientific program. Taking part in the program were several doctors from the University hospital in Augusta and from Macon who are on the MSH consultating staff. They included Drs. Hoke Wommack, Stephen Brown, Richard Torpin, David Williams, Stewart Flanagan, and Curtis Carter, all of Augusta; Dr. J. B. Stewart, Dr. Mildred B. Hatcher, and Dr. John I. Hall, from Macon. In the evening the doctors and their wives gathered at the Veterans Club for a social hour and supper.

Habersham County Medical Society performed a public service when they sponsored a large newspaper notice entitled "When You Need a Doctor" which appeared in the *Tri-County Advertiser,* Clarkesville. The notice was run to make certain that the people of the area could obtain medical care at all times and listed the doctors and their office hours and phone numbers. Seven suggestions in obtaining medical aid were also given.

Thomas County Medical Society entertained visiting members of their profession at the John D. Archbold Memorial Hospital, Thomasville, on June 18. Some 300 invitations were sent out to the profession in Florida, Alabama and throughout the Second District of Georgia. Dr. Fred Murphy, president of the society, presided over the scheduled program which included talks by Dr. Willard B. Wirth, of Tulane University and James D. Rives, professor of clinical surgery, Louisiana State University of Medicine. Guests and visitors made an inspection of the new out-patient clinic of Archbold hospital which was followed by a social hour at the Glen Arvin Country Club. Later a barbecue was served by the hospital for members of the society and their guests.

Bibb County Medical Society held its regular monthly meeting July 1 at the Pinebrook Inn. Dr. O. F. Keen, president of the society, introduced the guest speaker, Dr. Homer Swanson, Associate Professor of Neuro-Surgery, Emory University School of Medicine, Atlanta. Dr. Swanson addressed the society on the subject of "Etiologies of Subarachnoid Hemorrhage."

DEATHS

BARTON: *Dr. John J. Barton,* 82, of Dublin, died July 8 after a few months of ill health. A native of Wrens, Dr. Barton graduated from the Medical College of Georgia in 1896. He had been a practicing physician for 61 years in Laurens county.

LANIER: *Dr. John Roy Lanier,* 51, of Swainsboro, died July 7 after an extended illness. Dr. Lanier graduated from the Georgia Medical College, and had practiced in Emanuel county since 1928.

VINTON: *Dr. Luther Mansfield Vinton,* 63, of

Atlanta, died unexpectedly of a heart attack July 2 at his residence. A native of Alapaha, Dr. Vinton graduated from Emory University School of Medicine in 1921. Practicing in Atlanta for more than 30 years, Dr. Vinton served on the Fulton County Welfare board for 11 years.

PERSONALS

Dr. Sam Anderson, of Atlanta, is now associated with Dr. John D. Campbell in the practice of psychiatry in the Doctors Building, Atlanta.

Dr. J. E. Billings, of Calhoun, is reported "slowly recovering" from a heart attack suffered recently when on vacation in Boone, N. C. While at present Dr. Billings is in the Boone Hospital, it is hoped that he will return to Calhoun in a matter of weeks.

Col. Walter M. Bartlett, M.D., of Decatur, now serving as Medical Consultant, Eighth Army Headquarters, has been elected president of the "38th Parallel Medical Society of Korea." This unique society is composed of medical personnel in I Corps and IX Corps areas. It meets twice a month on the 38th parallel to hear experts, often from Japan or the Department of Army.

Dr. Henry G. Carter, of Decatur, announces the opening of his office for the practice of general medicine at 459 Candler Rd., Decatur.

Dr. Charles F. Cooper, Jr., of Atlanta, is now associated with Dr. Anton V. Hallum in the practice of opththalmology in the Doctors Building, Atlanta.

Dr. Faust Durden, First Lieutenant stationed at Fort Benning Hospital in the Army Medical Corps was assigned to duty in Tokyo and will leave the U. S. within the next few days. Dr. Durden is a native of Monroe.

Dr. R. H. Fike, physician in charge of the x-ray department at Vereen Hospital, recently received the honorary degree of doctor of science from his alma mater, Clemson College, S. C.

Dr. William T. Gist, of Summerville, has been called to active duty in the rank of Captain in the Army Medical Corps. *Dr. W. P. Martin,* formerly of Macon will take over Dr. Gist's practice.

Dr. W. D. Hall, of Calhoun, was elected president of the Sequoyah Country Club at a recent meeting of the membership.

Dr. Thomas J. Howard, a native of Augusta, will open his office for general practice at 842 Greene Street, Augusta, July 7.

Dr. Ralph A. Huie, Jr., specializing in internal medicine and cardiology; *Dr. John McClure, Jr.,* specializing in surgery; *Dr. Charles M. Silverstein,* specializing in diagnostic roentgenology and internal medicine; and *Dr. G. R. Sutterfield,* specializing in obstetrics and gynecology, announce the opening of their joint offices to be known as the Buckhead Clinic, 3254 Peachtree Rd., Atlanta.

Dr. Raymond L. Jordan, of Augusta, will move to Eastman to be associated with Dr. Harold W. Long at the Eastman Hospital. Dr. Jordan will specialize in obstetrics but will also do general practice work.

Dr. J. J. Kite, of Atlanta, was author of a scientific paper, "Treatment of Flatfeet in Children," which appeared in the June issue of the *Medical Annals of the District of Columbia.*

Dr. J. A. Leaphart, of Jesup, was recently given the William A. Murphy Award, an annual presentation to the most outstanding citizen of Wayne County. This is the second time a member of the profession has received the Murphy Award; last year it was presented posthumously to Dr. T. G. Ritch, who died in February of 1951.

Dr. Julian T. Lokey, of Thomson, was released from the Medical Corps of the U. S. Army after serving 18 months of active duty. Dr. Lokey will return to Thomson to practice general medicine and his office will be located in the Wilson Building.

Dr. James W. Purcell will associate with *Dr. Henry E. Steadman,* of Hapeville, whose offices are located at 3021 Stewart Ave., Hapeville.

Dr. Bill Purcell and *Dr. Charles Richards,* of Calhoun, have opened new offices for the practice of medicine above the Calhoun Drug Co., Calhoun.

Dr. C. S. Pittman and *Dr .Carl Pittman, Jr.,* of Tifton, have moved into their new offices located at the corner of Tift avenue and Tenth street in Tifton.

Dr. Albert A. Rayle and *Dr. Albert A. Rayle, Jr.,* of Atlanta, announce their association in the practice of radiology in the Doctors Building, Atlanta.

Dr. Martin Smith, of Gainesville, was notified that he had passed the examination of the American Board of Pediatrics and was accepted for membership in that professional group.

Dr. Ray Spanjer, of Cedartown, was the guest speaker at the Cedartown Kiwanis Club last month. Dr. Spanjer spoke on the organization and functions of the Public Health Department, from the state and local level.

Dr. J. Jack Stokes, of Atlanta, announces the opening of offices in the Medical Arts Building,

Atlanta, for a practice limited to ophthalmology.

Dr. Margaret J. Wall, of Atlanta, will associate with *Dr. W. Elizabeth Gambrell* in the practice of internal medicine with offices at 151 Ponce de Leon Avenue, N. E., Atlanta.

LETTERS

Gorgas Hospital
Ancon, Canal Zone
July 15, 1952

To the Editor:

As a result of the usual turnover in personnel that is a yearly occurrence in the summer with us, we are short of physicians in certain critical areas. Remembering your sympathetic attitude toward us and our problem, I am writing to give you a list of these vacancies thinking that possibly you might know of someone who would be interested in a tour with us. Along with this letter to you I am sending one to other consultants who have visited us and are familiar with our set-up. Any help you can give in publicizing these vacancies will be greatly appreciated.

(1) *Assistant Chief X-Ray Service*
Board Certified $10,450
Two or more years formal training ... 8,800
(Description of X-ray Service enclosed)

(2) *Chief and Assistant Chief Pediatric Section*
Board Certified $10,450
Two or more years formal training ... 8,800
(Description of Pediatric Service enclosed)

(3) *General Surgeon—Colon Hospital*
Board Certified $10,450
Two or more years formal training ... 8,800

(4) *Obstetrician—Colon Hospital*
Board Certified $10,450
Two or more years formal training ... 8,800

Clifford G. Blitch
Colonel, Medical Corps
Superintendent

Independence, Louisiana
July 9, 1952

To the Editor:

My colleague, who is now in the Navy and will be until July 1953, and I are interested in a general practice of medicine. We would like to practice in a small town or community of 1,500 to 8,000 population, where there are no actively practicing physicians, or where there is need for more physicians.

We are both graduates of the Medical College of Georgia in the class of 1951, and are less than 30 years of age. I am now a general practice resident at Lallie Kemp Charity Hospital, Independence, Louisiana, and plan to enter general practice in July 1953.

We would appreciate any information you might give us on available locations in Georgia.

Very truly yours
James T. McConless, M.D.

SCHOOLS

The appointment of Dr. Eugene B. Ferris, Jr., of Cincinnati, as professor of medicine and chairman of the department of medicine at Emory University was announced by Emory University President Dr. Goodrich C. White.

Also added to the Emory medical school faculty were Dr. Bernard L. Hallman, Atlanta, as instructor in medicine; and serving on a voluntary basis are the following local physicians: Dr. Paul Thomas Manchester, Jr., Dr. Richard E. King, Dr. Griggsby T. Cowart, Dr. Charles F. Cooper, Dr. Stacy W. Burnett, Dr. Simon Krantz, Dr. Edgar Grady and Dr. Joseph J. Stokes.

Dr. R. B. Greenblatt, head of the department of endocrinology of the Medical College of Georgia, has been awarded the Certificate of Merit of the American Medical Association. The award was made in recognition of an exhibit presenting a study of Cushing's disease and the adreno-genital syndrome. The display was entered in the association's annual meeting at Chicago.

Emory University's newest and smallest school will graduate this September two students trained as medical record librarians. The year-old school fills a need in a field in which the demand far exceeds the supply.

PUBLIC HEALTH

A recent editorial in the Journal of the American Medical Association confirmed a stand taken a year ago by the Georgia Department of Public Health advising parents to give immunizations during the polio season. At that time the state health department advised immunizations against whooping cough, diphtheria and tetanus. The AMA editorial summarizes conclusions reached at a conference of poliomyelitis investigtaors, epidemiologists, pediatricians, allergists and health officers held in March sponsored by the U. S. Public Health Service and the National Polio Foundation.

Dr. Winfield K. Sharp was named the Assistant to Dr. Lester M. Petrie of the Preventable Disease service of the Georgia Department of Public Health. Dr. Sharp's special assignment will be in civil defense. He is a graduate of the Atlanta College of Physicians and Surgeons, class of 1913.

Dr. Walter Wilsen Otto has resumed his duties as deputy health commissioner of Chatham county. He took leave to attend Columbia University where he recently received his MPH in public health. Chatham Health Commissioner Dr. Clair Henderson assigned Dr. Otto to tuberculosis control.

Dr. Vernon B. Link, Deputy Officer in Communicable Disease Center, U. S. Public Health Service has just been appointed to the Expert Advisory Panel on Plague of the World Health Organization of the United Nations.

Dr. Donald S. Martin has been appointed Chief of the Bacteriology Laboratory of the Communicable Disease Center, USPHS. Dr. Martin has for the past two years been Dean of The University, Puerto Rico. He is the co-author of Zinsser's "Textbook of Bacteriology" and has written many other works.

Dr. M. B. Copeloff, of Atlanta, has been appointed State Consultant Physician of the State Department of Public Welfare. Dr. Copeloff will assume responsibility for determining whether or not persons applying for aid under the State's new assistance program—Aid to the Permanently or Totally Disabled —are eligible from the medical point of view. This program became effective July 1.

HOSPITALS

Situated between Demorest and Clarkesville, the new $567,000 *Habersham County Hospital* began operation July 1. The *Stephens County Hospital* was dedicated July 13. Ground was broken and construction officially begun June 24 on the *Pierce County Hospital.* Drs. Thos. E. Oden G. T. Hendry and L. M. Hawkins participated in the ceremony for this new hospital to be built in Blackshear. *Gordon County* is also constructing a hospital located in Calhoun which will be completed in nine months.

At Valdosta a contract has been awarded for a 75 bed hospital. And the Marietta Hospital Authority has made application for a federal loan to construct a 50 bed addition to the *Kennestone Hospital* at Marietta.

As a result of community cooperation, the people of Whigham have just completed a modern clinic building, which they hope will serve as an attraction for a needed young doctor to serve the town. Dr. M. W. Dykes, the community's only doctor, is 85 years old and wishes to retire. The building was built by the town government and now offers a doctor free use of the modern, fully-equipped clinic. Whigham's population is 950 with a trade area community of 6,000 to 8,000 people.

Dr. T. C. Boswell, of Atlanta, opened the *Tate Clinic* for the general practice of medicine. The clinic building at Tate is completely equipped with x-ray and other equipment.

The *Mitchell County Hospital* has recently been named to the American Medical Association and the American Hospital Association membership.

Dr. Leo R. Tighe, manager of the *Veterans Administration Hospital,* Augusta, has announced that Dr. Ben W. Lichtenstein, of Chicago, will present a series of lectures as a part of the educational program for the medical staff.

The *Vereen Memorial Hospital, Moultrie,* had as guests of their medical staff at a meeting in July, Dr. Warren B. Matthews, pathologist, of Atlanta, and his assistant, Dr. Rosina Vincenzi, of Atlanta. Dr. Matthews talked principally on the subject of arteriosclerosis and illustrated his talk with colored slides and microfilms.

The *Leaphart Hospital Group, Jesup,* consisting of eight doctors and two pharmacists was host to about 40 doctors and pharmacists of Southeast Georgia on July 17. The meeting represented an effort on the part of the Group to meet the other doctors and druggists of the area and permit exchange of ideas and better understanding between

them. A buffet dinner was served in the home of Dr. J. A. Leaphart, president of the Leaphart Hospital, Inc., and after dinner guests enjoyed a showing of medical films.

The monthly staff meeting of the *Middle Georgia Hospital, Macon,* was held July 16 on the roof garden of the Doctors Building in Macon. Dr. Robert Edenfield presided and the program for the evening consisted of a talk by Dr. J. P. Woodhall on "Carcinoma of the Esophagus."

The *Macon Hospital* monthly staff meeting was held July 22 in the dining room of the hospital. The program featured two case reports by Dr. James F. O'Daniel, Resident in Surgery. The first case presented was that of a middle aged colored male with a ruptured diverticulum of the ascending colon. The second case discussed was that of a middle aged colored female who had a large mass in the left upper quadrant, which on operation was found to be a large pedunculated leiomyosarcoma which was attached to the stomach by a very small stalk.

BOOKS

REVIEWS

DOCTORS IN BLUE, by George Worthington Adams, Professor of History, Colorado College. New York. Published by Henry Schuman, 1952.

Although 87 years have passed since the War Between the States, and a vast literature has grown from it, its history continues to be revised and supplemented by competent authorities, and never ceases to hold attention. While it was small as compared with the two World Wars, in the author's opinion the conflict was the great war of the century between the Napoleonic Wars and World War I.

While war is to be abhorred, it is true that nearly every war becomes a school for learning more about medicine and surgery the hard way, so that there is marked improvement in the care of the sick and wounded between the beginning and the end of the conflict. Such was the story of military medicine during our sectional struggle, as brought out by Dr. Adams in this informative volume about the Union Army. The author has previously contributed an article on "Confederate Medicine" in the *Journal of Southern History,* July, 1940.

Since our country has engaged in four other wars during these 87 years, and has no assurance that another World War is not impending, we should feel prompted to know of the application of our medical preparedness to the care of soldiers on the battlefield and in military camps. The beginning of the knowledge of a subject lies in learning of its past, and "Doctors in Blue" furnishes a worthwhile introduction.

The American War of 1861-1865 came in the midst of the development of modern medicine and surgery. Anesthesia was discovered in 1842, but was just then coming into its own as a practical procedure, and it was found that chloroform was preferred to ether as a military anesthetic agent on account of its less bulk and greater ease of transportation. Antiseptic surgery was not to be announced by Lister until 1867, while the science of bacteriology was to arrive even several years later. It is remarkable, however, that before this time the fact that more to prevent infection was possible than was being done, was in men's minds, as when Adams tells of a carbolic acid spray being used at Jonesboro, Georgia, by Surgeon Edward Batwell, during Sherman's March to the Sea.

The book refers to the conflict as the "Civil War," but the United Daughters of the Confederacy insist that it was the "War Between the States" and not a civil war. At any rate, "Civil War" is easier to write and to say.

"Doctors in Blue" presents many facts of historical interest. We learn that this war saw the beginnings of ambulance field work, the Army Nurse Corps, and other organizations and practices now taken for granted; and helped clarify the proper relationship of line officers to medical officers, and of regulars to reserves. Although Henri Dunant, of Switzerland, first laid the foundation of the Red Cross Society in 1862, this organization as such took no part in the War Between the States. Clara Barton knew nothing of the movement at this time, but rendered much needed help to wounded and sick soldiers, as a one-woman unpaid voluntary relief agency rather than as a nurse.

As in most wars, disease was the cause of more deaths than war wounds, and the book discusses in detail hygiene and sanitation, and the treatment of the various fevers and dysenteries which was marked by such high mortality. Calomel and tartar emetic were employed so extensively, and often with such disastrous consequences, that a circular was issued removing the drugs from the supply table of the Army. It was said at this time, some physicians, especially in the South and West, would give a dram of calomel every hour. In spite of heroic doses of calomel, and other strenuous measures, however, the end results of the handling of medical cases were

better than might be surmised.

The references are complete and well chosen, while the war-time photographs are excellent, and could scarcely be surpassed. Physicians and laymen alike will enjoy reading the volume.

—Frank K. Boland, M.D.

BOOKS RECEIVED

The following books have been received and the courtesy of the publisers is gratefully acknowledged. Reviews of books that have particular interest to Georgia doctors will appear as space permits. Additional information in regard to all books received will be gladly furnished by this office.

Culdoscopy A New Technic in Gynecologic and Obstetric Diagnosis: By Albert Decker, M.D., D.O.G., F.A.C.S., Clinical Professor of Gynecology and Obstetrics, New York Polyclinic Medical School and Hospital. Associate Attending Physician in Gynecology and Obstetrics, New York Polyclinic Hospital. 148 pages with 50 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $3.50.

The Treatment of Injuries to the Nervous Systems By Donald Munro, M.D., F.A.C.S., Surgeon-in-Chief, Department of Neurosurgery, The Boston City Hospital; Associate Professor of Neurosurgery, Boston University School of Medicine. 284 pages with 47 figures Philadelphia and London: W. B. Saunders Company, 1952. Price $7.50.

MISCELLANY

A plaque honoring the memory of the late Dr. Craig Barrow was dedicated July 1 in the Central Hospital of Georgia at Savannah. It was Dr. Craig's foresight that was responsible for the erection of this hospital. Mrs. Barrow, widow of the hospital chief attended the ceremony with her daughter and two sisters. Dr. C. F. Holton, who succeeded Dr. Barrow, spoke at the impressive exercises.

Dr. W. R. Baker, of Hawkinsville, was recently honored in Chicago by becoming a member of the International Academy of Protology. The membership includes physicians and surgeons from all over the United States.

Dr. Thomas Edwin McBryde, of Rockmart, has been honored by the Georgia Medical Society with the presentation of an award in recognition of his 50 years as a medical practitioner in the State of Georgia.

Dr. Harold L. Murray, of Atlanta, will take charge of the first clinic in Georgia devoted exclusively to the treatment of arthritis and rheumatism at Grady Hospital. Dr. Murray was awarded a $3,000 Arthritis Fellowship given by the Atlanta chapter, Arthritis and Rheumatism Foundation. The opening of this clinic will be a major step in the program to provide adequate treatment for more than 30,000 arthritic sufferers in the Atlanta area, according to L. F. Montgomery, president of the Atlanta chapter, Arthritis and Rheumatism Foundation.

Col. Edgar M. Dunstan, commanding officer of the 358th. General Hospital (Reserve) of Atlanta was presented with the Third Army Certificate of Achievement at Fort Benning July 28. The award is being presented to Colonel Dunstan for his "outstanding performance in preparing medical aspects of Georgia's Civil Defense plans."

Dr. O. L. Rogers, of Sandersville, was named Washington County's Most Outstanding Citizen of 1952. This honor, shared with another citizen, was bestowed on Dr. Rogers by the Washington County Farm Bureau at their recent festival held in Tennille.

The Medical Association of Georgia presented on July 11 two prizes at the 66th. convention of the Georgia Press Association in Savannah. Awards were given the daily and weekly newspaper accomplishing the most for their communities in furtherance of health and medical care. Winner in the daily newspaper division was the *Daily Times,* Gainesville, and in the weekly field the *Coffee County Progress* won an award.

The American Goiter Association again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. Essays may cover either clinical or research investigations; should not exceed 3,000 words; and must be forwarded in duplicate to the Corresponding Secretary, Dr. George C. Shivers, 100 East Saint Vrain Street, Colorado Spirngs, Colorado, not later than February 15, 1953. The award will be made at the annual meeting of the association May 7-9, 1953 in Chicago.

Dr. T. C. Davison and Dr. A. H. Letton, of Atlanta, will address the seventeenth annual assembly of the International College of Surgeons September 5 on the subject of Breast Tumors.

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI SEPTEMBER, 1952 NUMBER 9

Editorials

Calling All

COMMITTEE CHAIRMEN

YOUR JOB *for the* YEAR

Your careful attention is called to the publication of the proceedings of the House of Delegates in the July and August issues of the Journal of the MAG because herein is set down the business of the Association for the current year. The September issue includes the reports of all meetings of Council during and following the Annual Session, so that all members are in a position to know the status of the business of the Association, and to make plans to carry out the directions of the governing body of the organization.

Well known is the fact that much of the Association's activities is centered in its committees between sessions, and when they fail to function, any progress of the Association is completely thwarted. Also, it is well known that all committee activity stems from the leadership of its Chairman, so now the burden of responsibility falls on the shoulders of 19 men, who accepted these positions willingly and will full knowledge of the importance of work required.

Your Association offices have been reorganized and are run in a position to render all required assistance. Also the budget for the current year includes allowances for the secretarial and other needs of the various commtitees. All any chairman has to do is to pick up his nearest telephone and call ELgin 8271 collect to put the office forces of the Association behind the needs of his committee.

So that everyone may know again the names of the men who hold the future of the Association in their hands for the current year, the Committee names and Chairmen as follows:

Committee on Scientific Work—Thomas L. Ross Jr., Macon

Committee on Legislation—Spencer A. Kirkland, Atlanta

Committee on Medical Education and Hospitals—R. Hugh Wood, Atlanta

Committee on Medical Defense—Marion C. Pruitt, Atlanta

Committee on Professional Conduct—Ralph H. Chaney, Augusta
Committee on History and Vital Statistics—J. Calvin Weaver, Atlanta
Committee on Public Health—C. L. Ayers, Toccoa
Committee on Maternal Welfare—H. F. Sharpley, Jr., Savannah
Committee on Rural Health—Frank Vinson, Ft. Valley
Committee on Industrial Health—Allen M. Collinsworth, Atlanta
Committee on Public Relations—Stephen T. Brown, Atlanta
Committee on Cancer—J. Elliott Scarborough, Emory University
Insurance Board—W. S. Dorough, Atlanta
Advisory Committee to Woman's Auxiliary—Ralph H. Chaney, Augusta
Committee on Awards—Charles H. Richardson, Jr., Macon
Committee on Constitution and By-Laws—Allen H. Bunce, Atlanta
Committee on American Medical Education Foundation—Tully T. Blalock, Atlanta
Committee on Blood Banks—James Thoroughman, Atlanta
Committee on Abner Wellborn Calhoun Lectureship—Daniel C. Elkin, Atlanta
Medical Advisory Committee to Selective Service System—Carter Smith, Atlanta
Committee on Medical Civil Preparedness—Edgar M. Dunstan, Atlanta.

It is to these men that this open letter is addressed with the hope that they will review the actions of the House of Delegates as it pertains to their committee, and begin work at once.

The DANGER *of* CHLORAMPHENICOL (*Chloromycetin*)® THERAPY

Up until recently chloramphenicol was believed to be relatively free from toxic manifestations except for four isolated instances[1,2,3]. This valuable broad-spectrum antibiotic was discovered in 1947 by Ehrlich and associates[4] and synthesized in the research laboratories of Parke, Davis & Co. Gill[1] reported two cases of non-fatal agranulocytosis due to chloramphenicol. Rich and associates[2] recorded the first case of aplastic anemia associated with chloramphenicol administration. A number of other drugs had been employed but the relationship to chloramphenicol seemed fairly certain.

Last month eight new cases[5,6,7] were cited. Since then a number of cases has been collected by the Food and Drug Commission. Chloramphenicol is the only drug effective in typhoid fever. With rickettsial diseases, brucellosis, and many strains of organisms infecting the urinary tract, chloramphenicol may often be the drug of choice. In serious infections where safer drugs are ineffective or where sensitivity exists, the use of chloramphenicol is justifiable. It should not be used for trivial infections or when another antibiotic is almost equally effective. When given by necessity, its use should be controlled by careful blood studies at frequent intervals.

REFERENCES

1. Gill, P. F.: Agranulocytopenia following chloromycetin: Report on 2 cases. M. J. Australia, 1:768, 1950.
2. Rich, M. L., Ritterhoff, R. J., and Hoffman, R. J.: Fatal case of aplastic anemia following chloramphenicol (chloromycetin) therapy. Ann. Int. Med., 33:1459, 1950.
3. Volini, I. F. and others: Hemopoietic changes during chloromycetin administration. Proc. Central Soc. Clin. Research, 22:74, 1949.
4. Ehrlich, J. and others: Chloromycetin: New antibiotic from soil actinomycete. Science, 106:417, 1947.
5. Claudon, D. B., and Holbrook, A. A.: Fatal aplastic anemia associated with chloramphenicol (chloromycetin) therapy. J.A.M.A., 149:912, 1952.
6. Smiley, R. K., Cartwright, G. F., and Wintrobe, M. M.: Fatal Aplastic anemia following chloramphenicol (chloromycetin) administration. J.A.M.A., 149:914, 1952.
7. Sturgeon, Philip: Fatal aplastic anemia in children following chloramphenicol (chloromycetin) therapy. J.A.M.A., 149:918, 1952.

—A. J. Merrill, M.D.

Statement From

EMORY

on

MEDICAL DEVELOPMENT PLANS

In response to questions from the *Atlanta Constitution,* Emory University last month (August) issued a public statement on its medical school development, with particular reference to the Emory Hospital.

As most Georgia doctors already know, Emory has for many years been committed to a program of development of the Emory Hospital as a major unit in the teaching program of the medical school. My statement of last month reiterated this position, and pointed out that it would mean eventually that the entire hospital might have to be used for the patients of only the most active members of the University's medical teaching staff.

The medical facilities over which Emory has stewardship clearly exist for the purpose of carrying on the program of the medical school. We operate the Emory Hospital in order to provide a place where the most active medical teachers can work as they teach.

The transition to such a program has been and will continue to be gradual. This is partly in order not to inconvenience the many outstanding physicians and surgeons now on the hospital's staff who may not wish to be active members of the medical faculty.

The Georgia doctors planning Emory's future are convinced that one of the best bulwarks against state medicine is the continuation of a system of private medical education. Such a system can only be assured of continued existence if organized in the pattern toward which Emory is working, we feel.

As a matter of fact, most of the other great American medical schools have already found it necessary to adopt similar plans for securing a medical faculty. We at Emory have lagged behind.

It should be plain that the medical school is planning to provide its teaching staff in the future through the "clinic" method already in effect elsewhere. Under such a plan, it will of course be necessary to establish more teachers, on the campus and at Grady Hospital, who will support themselves by their clinical practice. Details of the organization of the medical faculty into a clinic or clinics have not been completely worked out. When discussions now under way have been completed, announcement will be made.

I should like to quote a recent statement by Dr. Goodrich C. White, president of the University, on the medical school development. President White said, "The greatest long-term service Emory can render the public and the medical profession is to use its facilities in such fashion as will be most certain to produce properly-trained physicians for succeeding generations.

"We should be planning for the school of medicine as a part of a great medical center here in the capital of the Southeast—not alone a part, but the very heart of such a center. Such a development has been under discussion for a long time. The time is at hand for the dream to begin to come true."

—R. Hugh Wood, M.D.,
Dean, Emory University
School of Medicine

Editor's Note: Such a radical change in the teaching policies at Emory is sure to provoke serious thought among its alumni and medical friends. Comments are invited and will receive the same editorial consideration.

SPECIAL NOTE

Those members of the Association who desire to present papers at The 1953 Annual Session must submit titles before *November 10, 1952*. Please mail this information to: Chairman, Committee on Scientific Work, Medical Association of Georgia, 875 W. Peachtree St., N. E., Atlanta.

—Thomas L. Ross, M.D.

Should the DOCTOR SUPPORT *the* HOSPITAL?

Recently we were interested to note a unique proposal made by a hospital fact finding committee in a Georgia county. This proposal, meant to be put into effect in the existing hospital and a new hospital being planned, was that physicians who practice in the hospital be required to pay to the hospital a 10.5 to 15 per cent commission on the fees collected by physicians from patients who are treated in that hospital.

The members of that hospital fact finding committee have lost sight of the fact that physicians provide medical care without cost to the patient for the indigent population in all counties where ever they practice in Georgia. Physicians receive no compensation for their services to indigent patients whether care is given in the office, home or hospital. Records of various hospitals throughout the State indicate that from 10 to 30 per cent of services furnished in those hospitals are for indigent care. In some cases these hospitals are reimbursed from tax funds for these services. In many instances there is no reimbursement to the hospital.

It should be recalled that the various hospital insurance plans, including Blue Cross, provide only for hospital charges. The insurance plan known as Blue Shield does provide payment to physicians.

To carry into effect the suggestion made by the fact finding committee mentioned above would be adding an additional load of 10.5 to 15 per cent to the present burden of providing services of indigent care by physicians to patients in hospitals. This is not sound from any standpoint. The proposals is not sound from the standpoint of hospital economics in that:

1. Physicians would be penalized for using the hospital which would tend to decrease occupancy rates and hospital income.
2. The 10-15 per cent tax, commission, or fee would result, as in the case of all taxes, in being eventually passed on to the consumer (sick patients in this case).
3. In return for the fees paid the hospital, the physicians would tend to expect more from the hospital, which would in time increase hospital operating costs.
4. The hospital would need to audit the charges and income of all physicians on staff which would intrude in the private affairs of individual citizens.

Most of us are so busily engaged in our day-to-day work that we frequently take for granted some of the facilities in our communities. Many of us do not pause long enough to analyze the various public functions of institutions in our communities such as schools, churches and hospitals. Primarliy, the function of a hospital in a community is to serve the sick of that community. This is its most important function. The fact that physicians use hospitals as workshops is of secondary importance. Physicians, dentists, nurses, pharmacists and others in the allied professions of the healing arts, serve humanity in the relief of pain and in the restoration of health. It is obvious that they should receive compensation for their services and not be taxed an additional 10.5 to 15 per cent to support a facility constructed primarily to provide community services.

—R. C. Williams, M.D.

VOCATIONAL REHABILITATION

Beginning August 4th and terminating August 9th, the Vocational Rehabilitation section of the State Department of Education met on Wilmington Island near Savannah. The meeting began with a series of lectures and discussions relative to techniques in consultation, guidance, and training and terminated with a stimulating panel discussion in which physicians representing all aspects of medicine were engaged in a question-answer session.

Begun in 1920 following an act of the Georgia Legislature which accepted the provisions of an act of Congress—"to provide for the promotion of Vocational Rehabilitation of persons disabled in industry or otherwise and their return to civil employment", it was not until 1943 that the medical and surgical aspects of the program were introduced. It has been perhaps the medical aspects more than any other part of the program which has been remarkably successful. The removal of a physical disability which permits employment has now become the major function of the program. Eligibility for participation depends upon many factors but it has been desirable to assist as many as possible with the funds and facilities available. The medical section functions under the aegis of a medical advisory committee. It is this committee which annually determines the fee schedule which for the most part is based on a 65—75 per cent of "the normal or average fees charged throughout the state of Georgia." These fees are comparable to the fees established under the workmen's compensation insurance program.

It would seem that this effort on the part of the Georgia Vocational Rehabilitation department warrants the support of Georgia physicians. Here we have an established organization which can remove the stigma of "charity" from the disabled person whose medical care would otherwise require the services of community welfare agencies. The implications of this are numerous. In our society one retains self-respect and the respect of his fellow citizens when he accepts Government assistance as a loan, not a gift. The Vocational Rehabilitation program has been a "loan agency", much like other Governmental agencies in which the loan permits the re-establishment of a self-sustaining citizen. Examination of this phase of the program and proof that the individual actually remunerates his government albeit indirectly is seen in statistical reports released by the Division of Vocational Rehabilitation. The income tax returns for 1951-52 reveals that individuals who came under Vocational Rehabilitation supervision returned more to the Government than their total cost of care.

A program which develops a self-supporting citizen merits the encouragement of the medical profession of Georgia and especially those physicians who have played a dominant role in cooperating with and encouraging this project.

—Peter L. Scardino, M.D.

REMEMBER THE DAY THE 10-13 OF MAY

Medical Association of Georgia 103rd Annual Session at Savannah

Scientific Articles

Medical Conference a

WILLIAM F. FRIEDEWALD, M.D., Atlanta

POLIOMYELITIS

The virus of poliomyelitis infects many individuals, particularly children and young adults, during epidemic periods. The majority of these patients either have no symptoms or present the findings of a transitory nonspecfiic illness. These inapparent or minor infections are of great importance in disseminating the virus in a community and in calling forth immunity in the infected individuals. Interest in poliomyelitis from the clinician's viewpoint, however, stems from the fact that in a small percentage of patients the virus causes destruction of motor neurons resulting in weakness or paralysis of voluntary muscles. The development of the paralytic disease in contrast to the nonparalytic or the abortive forms appears to be dependent upon a variety of factors. These include the virus strain, the degree of immunity as determined by previous exposure to the virus, fatigue and chilling, pregnancy and tonsillectomy. More recently, evidence has been presented to indicate that injections for the prevention of diphtheria, whooping cough and possibly tetanus, when given during an epidemic of poliomyelitis, may occasionally localize the paralysis in the inoculated extremity.

The severity and extent of the acute illness shows great irregularity, but the sequence of events in most cases follows a fairly consistent pattern. The onset is similar to that of many acute illnesses with headache, malaise, low grade fever, mild soreness of throat, nausea and occasionally vomiting. These symptoms may subside after one to three days with no further signs of infection or may be followed in one to seven days by a more severe illness, with an exacerbation of the initial symptoms and signs of central nervous system involvement. At this time the patient appears acutely ill, headache is a prominent symptom and varying degrees of spasm and pain in the muscles of the neck, back and posterior thighs are observed with stiffness of the neck and back. This is often referred to as nonparalytic poliomyelitis, and in many patients no further manifestations of the disease may be found. The occurrence of spasm, weakness or paralysis of voluntary muscles depends on the distribution and severity of the lesions in the central nervous system and appears usually from the second to the fifth day of the febrile illness. It is characteristic of poliomyelitis that the muscle involvement is patchy in its distribution, affecting a group of muscles, an individual muscle or a portion of a particular muscle. The paralysis is flaccid in type and the deep tendon reflexes of the involved extremity are usually depressed or absent.

Bulbar poliomyelitis is manifested by involvement of one or more of the motor cranial nerves with lid lag, strabismus, facial paralysis and paralysis of the palate, pharynx or larynx as the most common findings. More serious, however, is involvement of the respiratory or circulatory center. Variations in the rate and depth of respirations together with cyanosis, anxiety, restlessness and increasing pulse rate indicate involvement of the respiratory center. Patients with involvement of the circulatory center have a dusky red appearance, a rapid pulse which is irregular and thready, and a low pulse pres-

Weekly Medical Conference, given on July 15, 1951 at the Emory University Hospital, Atlanta.

sure. The encephalitic form of poliomyelitis is occasionally seen in which hyperexcitability, anxiety, muscular tremors, twitching, delirium, coma and occasionally convulsions are the principal symptoms, indicating a more diffuse involvement of the brain. The prognosis in bulbar poliomyeltitis is grave and accounts for most of the fatalities.

Emory University Hospital

Examination of the spinal fluid often provides supporting evidence for the diagnosis of poliomyelitis. The cell count ranges from 10 to 500 per ml. but is usually less than 200 cells per ml. The predominant cells are small lymphocytes, but early in the course of the disease polymorphonuclear leukocytes may be found but these rarely exceed 50 per cent of the total. The proteins are increased but usually not higher than 60 to 125 mg. per cent. The spinal fluid sugar and chlorides are within normal limits.

The diagnosis of poliomyelitis may be difficult because of the similarity of the manifestations of the illness to other infectious diseases and the lack of specific diagnostic criteria. The clinician must rely on a careful evaluation of the course of the illness, the physical findings and the available laboratory aids. In some instances a period of observation is necessary before a diagnosis can be made. The possibility of poliomyelitis must be kept in mind in any patient, particularly children and young adults, who presents the symptoms of an infectious disease during the poliomyelitis season. Only a presumptive diagnosis can be made in patients with abortive or nonparalytic forms of the disease and the differentiation between poliomyelitis and various other viral and leptospiral infections may be possible only after detailed laboratory studies. There is usually little doubt about the diagnosis in the paralytic or bulbar types of poliomyelitis. It should be emphasized that the acute febrile illness in the various forms of poliomyelitis usually does not last longer than four to seven days, and during this time the muscle paralysis reaches its maximal extent. In general, the diagnosis of poliomyelitis should be questioned if the following are found: a febrile illness continuing longer than a week or 10 days, sensory changes, spinal fluid cell counts of 500 to 1500 cells per ml. or a high protein (above 150 mg. per cent), diffuse progressive and symmetrical weakness, and acute localized tenderness as seen in arthritis, bursitis or acute osteomyelitis. It is important to recognize the paralytic disease caused by tick paralysis because of the dramatic recovery of the patient upon removing the tick unless the disease has progressed too far. In tick paralysis there is little or no fever, muscle spasm and stiffness of the neck is minimal or absent, the muscle weakness is usually symmetrical, diffuse and ascending, and the spinal fluid is normal.

Treatment of patients with nonparalytic poliomyelitis consists of bed rest, moist heat to back and neck to relieve spasm and pain, and careful observation for signs of muscle involvement or bulbar symptoms. In the paralytic disease, muscle tenderness and pain are relieved by proper positioning, hot wool compresses and gentle passive motion. Every effort should be made to prevent deformities and contractures of muscles of a paralyzed extremity. Sedatives and analgesics are contraindicated because of possible respiratory failure.

Bulbar poliomyelitis presents special problems in management. Oxygen is important to combat cerebral anoxia and is best given by nasal catheter. The throat msut be kept clear of secretions by postural drainage and suction. Tracheotomy is indicated if the airway cannot be maintained by these methods. In the presence of pharyngeal paralysis, no food or liquids are given by mouth and the patient is maintained by parenteral fluids or tube feedings. Atelectasis, pulmonary edema and infection are possible complications in these patients. Prophylactic penicillin and streptomycin are usually indicated, and occasionally bronchoscopy is necessary. The respirator is most helpful in those patients with weakness or paralysis of the intercostal muscles and diaphragm, due to damage of the anterior horn cells of the cord. The patient should be weaned from the respirator as soon as possible to prevent dependency on it and to facilitate the program of rehabilitation and muscle re-education after the acute illness has subsided.

Lines for Certain Scientists

—Daniel Whitehead Hicky

Science, leave poets something for
The heart's high dreaming—a country, a star
Past dials' turning, a magic screen,
Some April hour still breaking green
And white with blossoms in their prime,
Not here and now, before its time.

Leave some small curve of hill or beach
Still beckoning beyond my reach,
A flight of birds and their strange cry—
Beyond the searchlight of the eye,
A slowly gathering fist of thunder
To shake the temples of my wonder.



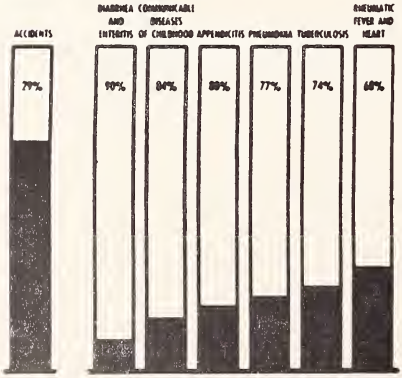
HOWARD J. MORRISON, M.D., Savannah

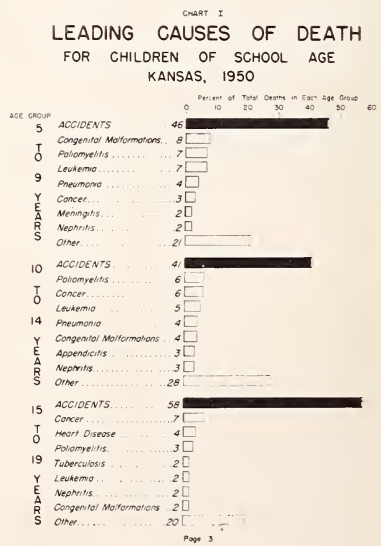
CHILDHOOD

Accidents are the leading cause of death in the child from one to 14 years of age. Accidents cause almost as many deaths in this age group as all diseases combined.[1] The prevention of death from accidents is the greatest challenge to the practicing physician today. The degree of our success in an accident prevention program will largely determine whether the death rate among children continues to fall as it has during the past half century. We must stop considering accidents as an act of God and realize that accidents are either an act or negligence of man. The percentage decrease in death rates from accidents has lagged far behind those from diseases in the age group one to 14 years. This has been graphically illustrated by Armstrong and Cole.[2] In this age group from 1931 to 1947, the death rate from diarrhea and enteritis decreased 90 per cent while the death rate from accidents decreased only 29 per cent. Percentage decreases from communicable diseases was 84 per cent, appendicitis 80 per cent, pneumonia 77 per cent, tuberculosis 74 per cent, and rheumatic fever and heart disease 68 per cent. This should show the need for a program of accident prevention.

The leading causes of death for children of school age in Kansas during 1950 has been reported.[3] In

FIGURE 2—Accidents versus Certain Diseases





Read before the Section on Pediatrics at the One Hundred Second Annual Session of the Medical Association of Georgia, May 12, 1952.

the age group five to nine years, accidents accounted for 46 per cent; in the age group 10 to 14 years, accidents accounted for 41 per cent and in the age group 15 to 19 years, the percentage of deaths from accidents was 58 per cent. This reemphasizes the fact that accidents present the most serious problem facing physicians and public health officials today insofar as the child is concerned.

To further emphasize the importance of accidents, Platou's chart[1] of the leading causes of death in children 1-14 years during 1948 shows almost 11,000 deaths from accidents and slightly over 11,000 deaths from all other causes combined. Accidents caused more deaths than pneumonia, congenital anomalies, cancer, tuberculosis, leukemia and heart disease combined. Poliomyelitis ranked eighth as the cause of death in this year. It is estimated that for every accidental death, 150 additional disabling accidents occur. According to these statistics and estimates, approximately 1,500,000 children suffered from accidents during 1948. This does not include the bruises, split lips, chipped teeth, bloody noses and scalps that do not reach either a physician or the emergency room of a hospital.

ACCIDENTS

and Their

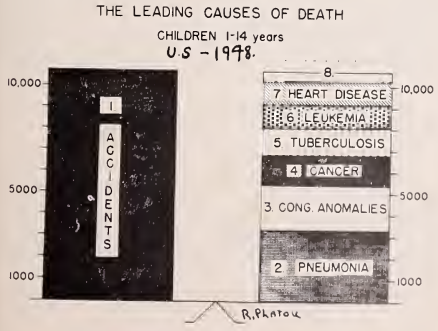
PREVENTION

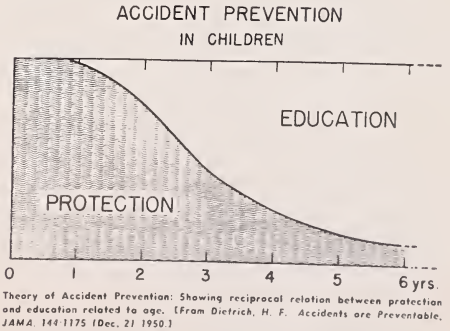
Why has not the reduction in deaths from accidents paralleled that of disease. The answer is simple. There are no magic drugs to prevent accidents. There is no law that can be passed to prevent accidents as the almost universal law of milk pasteurization that has prevented most of the diarrhea and enteritis. On the other hand, it may be possible to immunize children against accidents just as they have been immunized against certain specific diseases. The difference is that these children will not be immunized with a needle against accidents but instead through the intelligent instructions they receive; first from their parents and later from their school teachers, playground leaders, boy and girl scout leaders and coaches in various sports.

A most interesting theory of accident prevention in children is that of Dietrich's[4] which shows the reciprocal relation between protection and education; protection for the young children, education for older children and a proper combination of protection and education for the in between age group. As children learn more from education, they need less protection. There must be 100 per cent protection at birth and through most of the first year of life. Even in this first year of life, some education should be instituted. A lesson to prevent suffocation from smothering may be taught during the first few weeks of life. Any normal healthy infant will learn to turn its head to one side when placed upon its abdomen on a firm hard mattress without pillows or loose rubber sheets. No infant should be placed on its abdomen alone until the mother or an attendant is assured of that particular infant's ability to maneuver its head.

At about three months of age, the average infant will learn to turn over from its abdomen to its back. This should be encouraged in order to develop self reliance in the infant, but the infant should be kept in a secure crib or on the floor in order that this first turn-over does not result in a serious accident from falling on the floor from a crib or bed.

At about a year of age, the infant is exposed to





Theory of Accident Prevention: Showing reciprocal relation between protection and education related to age. (From Dietrich, H. F. Accidents are Preventable, JAMA. 144:1175 (Dec. 21 1950.)

minor painful experiences, such as the first fall when pulling up and attempting to walk. This helps infants and children to learn about gravity. If allowed to pursue their natural desire to crawl and later walk without too much help from adults, they perform these acts with much less difficulty and with much less pain from falling. These specific lessons should be continued during the critical period of one to five years of age.

By this time, the pattern for future safe conduct is set. One must remember that the school child carries the education relative to accident prevention with him whereas protection for the most part remains at home.

These infants must be completely protected against serious burns by not being allowed near the stove (whether in use or not) or open flames, matches, caustic substances and electrical connections. This is 100 per cent protection, but it is not enough. Probably the most vulnerable child to accidental tragedy is the over protected one. Children have to be encouraged to learn that hot things burn. Instead of forbidding him (which teaches nothing but resentment) to touch commonplace hot objects, one should simply say "that is hot—if you touch it, it will burn you." The average child touches, gets burned and a valuable lesson is learned that may prevent a fatal accident at a later age. Furthermore, the parent gains stature in the child's eyes because of the parents prophetic ability and on future occasions the parent's opinion is given great respect. A normal child will suffer certain frustrations without permanent emotional scarring. There is probably no young adult so emotionally vulnerable to the pressures of a frustrating civilization as the young adult who has not had to cope with some childhood frustrations. In the same manner, we can expect certain minor injuries in the process of growing up. Split lips, bruises, chipped teeth, blistered fingers and even simple cuts and broken bones must be accepted as normal wear and tear. Properly handled by the parents and physicians, they can be of positive educational value in the prevention of fatal accidents.

Dietrich's[4] theory of accident prevention consists of (1) forethought, (2) time, (3) discipline.

1. Forethought requires that the physical abilities and intellectual interests of the child be anticipated. What can the child do? What hazards will the child's wants and abilities bring within his reach? What does the child like to do? The answers to these questions will suggest accident prevention action.

2. The need of time and patience is obvious. This is time that primarily has to be spent by the parents in thinking about accident prevention in relation to the individual infant or child; especially, the prevention of fatal accidents. Frequently, a minor painful accident may prevent a serious fatal accident. There should be no question of finding the time required to set up proper protective and educational safety measures. If parents would spend the time thinking of accident prevention that they spend on unnecessary worrying about minor contagious diseases, minor respiratory infections, the fear of poliomyelitis, etc., thousands of children would be spared annually from crippling and fatal accidents. If we really want self-confident, living, unscarred children, with two good eyes, ten fingers, ten toes, and a usable esophagus, we can find the time necessary for accident prevention.

3. Discipline should serve where reason cannot. Mild, consistent, logical discipline is as necessary to a child's sense of security as it is to his life. Discipline may be administered by a glance, a word, an act of deprivation, a tone of voice or very, very rarely by physical punishment. If one is fair, firm, and kind with a child, the need for physical punishment rarely arises. A child expects firmness as well as fairness and kindness in a parent, nurse, school teacher, doctor or anyone who has the individual child under their supervision. Firmness is often the prop that the child needs to remain emotionally secure. Naturally, as the child grows in years, there is a disproportionate need for firmness or discipline.

Accident prevention in children implies safe behavior in the adult transferred to the child through example. This should be a natural outgrowth of a normal, early parent-child relationship. The primary responsibility for accident prevention rests on the parents. Often at the time of the infant's first immunization, a mother will express the wish that she could "take the baby's shot for him." This is a good time to tell her that she and only she can "immunize" the baby against the greater hazard of a serious, possibly fatal accident.

Finally, any accident prevention program must be continuous. Children will need frequent reminding. The parents will also need frequent reminding. I have found an easy way to remind parents of accidents by placing a bulletin board in my office. Newspaper clippings are put on the bulletin board. In this way, the parents may see the various types of serious and fatal accidents that may occur. When comment is made about the bulletin board, I remind the parent that their child has about an equal chance to die from an accident as from a disease. Furthermore, the parent is told that the time and effort expended toward accident prevention will result in healthier children and adults.

REFERENCES

1. The Leading Causes of Death—Children 1-14 Years—U. S. 1948: Dr. R. Platou.

2. Armstrong, D. B., and Cole, W. G.: Can Child Accidents Be Prevented in Your Community? Am. J. Pub. Health 39: 585-593 (May 1949).

3. Kansas Student Accident Report: Kansas State Board of Health: Leading Causes of Death for Children of School Age, Kansas, 1950.

4. Dietrich, H. F.: Our Greatest Child Health Problem, Current Comment, J.A.M.A. 139:588 (Feb. 26) 1949: J.A.M.A. December 2, 1950 Vol. 144, pp. 1175-1179.

B. HOLLIS HAND, M.D., LaGrange

SURGERY *of the* UPPER GASTROINTESTINAL *Tract*

The purpose of this paper is to give an analytical report of the surgical procedures carried out on the upper gastrointestinal tract in a relatively small hospital. During the period reported, the average daily census of the City-County Hospital was less than 75 patients.

Of the 123 operations reported, approximately one-third are my own, and any opinions expressed do not necessarily reflect those of the other six surgeons whose cases are included. The relatively high incidence of malignancy reported is explained by the presence of the unusually active West Georgia Cancer Clinic in LaGrange.

Reference to the statistical table will show the indications for surgery, nature of lesions found, surgical procedures carried out, and results obtained.

In some cases of intractible ulcer, the pain persisted to such a degree as to warrant surgery, although there were no other serious complications. In all cases that proved to have congenital pyloric obstruction and in most adults with pyloric stenosis secondary to peptic ulcer, surgery was employed. All acute perforations were closed as soon as diagnosed. Most cases of bleeding from the upper gastrointestinal tract could be controlled medically, but the danger involved in older cases and in recurrent cases

STATISTICAL TABLE

Surgical Procedures	*No.*
Exclusion Operation	1
Gastrotomy	2
Pyloroplasty	2
Reconstruction of marginal ulcer	4
Gastroenterostomy	5
Vagotomy	5
Gastrostomy	6
Fredet-Ramstedt	8
Closure of acute perforations	24
Gastric Resection	66
Totals	123

Indications for Surgery
Persistent pain and vomiting
Pyloric obstruction
Perforation of ulcer
Bleeding
Fecal vomiting and emaciation
Persistence of gastric ulcer

Nature of Lesions Found	*No.*
Esophagus:	
Varix	1
Carcinoma	5
Stomach:	
Sarcoma	1
Carcinoma	13
Marginal Ulcer	5
Congenital pyloric stenosis	8
Benign ulcer	26
Duodenum:	
Atresia	1
Diverticulum	2
Benign ulcer	61
	123

Results	*Living*	*Dead*
Malignant:		
Esophagus	2	3
Stomach	6	8
Benign:		
Esophagus		1
Stomach	36	2
Duodenum	62	3
	106	17

Read before the Medical Association of Georgia in Annual Session, Augusta, April 19, 1951.

A Five Year Analytical Study of Cases Seen at the City-County Hospital, LaGrange from April 1946 to April 1951

necessitated surgical control, usually by gastric resection. One case of fecal vomiting that occurred many years after surgery proved to have a gastrojejunocolic fistula, which had developed as the result of a perforating marginal ulcer following a posterior gastroenterostomy. The other which recurred immediately following surgery was proved to have a gastroileal anastomosis. This case is of unusual interest and will be reported in detail. In any case of gastric ulcer that could not be cured medically in six weeks, it was thought that surgery was advisable, as these cases were considered potentially malignant.

Surgical Procedures

The exclusion operation was done in far advanced cases of carcinoma of the stomach with distant metastases. Even though the tumor was not removed, the patient has remained much more comfortable after diversion of the food by transection of the stomach above the tumor mass with gastrojejunostomy. Where at all possible, gastrectomy was performed as a palliative measure in gastric carcinoma in preference to doing a simple gastroenterostomy. Both of these procedures appear to have many points of superiority over simple palliative gastroenterostomies. Gastrotomy is useful mainly as an exploratory procedure, although in one case bleeding from esophageal varices was controlled by topical application of coagulant. The results of the Finney pyloroplasty have been disappointing in treatment of duodenal ulcer. Reconstruction of a marginal ulcer is usually difficult but gratifying whenever feasible. Gastroenterostomy and gastrostomy are mainly useful as palliative procedures to relieve obstruction; however, gastroenterostomy sometimes works well in treatment of duodenal ulcer if the gastric acidity is low. Vagotomy relieves ulcer pain immediately but sometimes gives a stormy postoperative course due to persistent vomiting that may not subside for many days. I feel this procedure should be reserved for poor risk patients and for marginal ulcers too difficult to reconstruct. The Fredet-Ramstedt operation has given uniformly good results for congenital pyloric stenosis. Simple closure is probably the best procedure in most acute perforations of peptic ulcers; however, resection of a perforated gastric ulcer with minimal spillage is permissible. Our most consistently good results for treatment of duodenal ulcer came from resection of approximately three-fourths of the stomach, with Hofmeister type gastrojejunostomy. The ulcer need not be excised in difficult cases provided all the antral mucosa is removed. The Billroth 1 procedure (Schoemaker modification) was used in five cases with excellent results to date; however, it is a more difficult procedure in my hands. In my opinion, complete gastrectomy should be used mainly in malignant cases of the stomach that are thought to be operable and that are reasonably good risks. Of the two complete gastrectomies done only one lived and the other has had to give special attention to his diet.

Results

Of the deaths in the benign cases, one three-day-old infant died from results of operation in an unsuccessful attempt to relieve obstruction due to congenital atresia of the duodenum and common bile duct. One elderly man died from subarachnoid hemorrhage. Another elderly man died from peritonitis resulting from simple closure of acute perforation of a gastric ulcer. One adult male died from peritonitis resulting from leakage at the site of the anastomosis. One young man died from peritonitis resulting from multiple perforations of the upper bowel secondary to gunshot wounds.

The following is the case report of the patient who had a gastroileostomy performed at another hospital prior to his admission to the City-County Hospital.

Report of Case

In August of 1949, a 41-year-old white male came in complaining of vomiting, pain, diarrhea, and extreme loss of weight. In his family history, he stated that a maternal aunt had died of carcinoma of the fundus of the uterus. His past history was essentially irrelevant except for having had an appendectomy with release of adhesions and a gastroenterostomy in October, 1948. He stated that he commenced to have fecal vomiting immediately following his last operation. He had lost 50 pounds in weight since that time. He had had almost constant diarrhea and epigastric pain. On examination, he was found to have marked dehydration, anemia. He had a small hernia in an upper right rectus incision, slight distention and epigastric tenderness. On gastrointestinal x-ray examination, there was a markedly dilated stomach with a moderate 24-hour retention of barium. There was some evidence of a diverticulum in the lesser curvature. There was apparently an anastomosis between the stomach and the terminal ileum.

The operation performed was a Hofmeister partial gastrectomy which was carried out after the anastomotic loop of the terminal ileum, including the enteroenterostomy, had been resected and an end to end anastomosis performed.

The results in this case were excellent. One year after the operation, the patient had gained 45 pounds in weight and was able to tolerate a general diet.

This case appeared particularly interesting to me because it violated several principles of gastric surgery with expected consequences. Simple gastroenterostomy is not satisfactory treatment for duodenal ulcer in a case with appreciable gastric acidity. The enteroenterostomy aggravated the already poor choice. Choosing the distal ileum insured marginal ulcer formation as well as immediate fecal vomiting.

WILLIS M. HENDRICKS, M.D., LaGrange

PREGNANCY *of Six Months Complicated by* METASTATIC MELANOMA

The purpose of this report is to present an unusual case in which the patient, a multigravida, was suffering with metastatic melanoma at the sixth month of pregnancy. Review of the literature reveals the following reported cases of melanoma complicating pregnancy. Weber, Schwarz and Hellenschmeid[1] reported a case in 1930 in which the patient died of melanotic sarcoma with visceral and subcutaneous metastases. The patient underwent surgery 18 months before pregnancy because of a melanotic sarcoma of the thigh. Emmert[2] reported in 1937 a case in which the patient died nine days after Caesarean section. Autopsy revealed in the left parietal lobe a tumor considered to be metastatic from a flat hairless mole which had been removed from the anterior surface of the left forearm eight months prior to death. Final diagnosis was squamous cell carcinoma with metastases to the brain. Clayton[3] reported in 1945 a case in which metastatic melanoma was not discovered in the patient until two years after delivery. The original melanoma was first noted during pregnancy. Holland[4] reported in 1949 a case in which the patient had a small black growth removed from the thigh six months before pregnancy with a recurrence during pregnancy reported as metastatic melanoma of the regional lymph nodes. Bender[5] reported in 1950 a case in which the patient died at term with widespread dissemination from a malignant melanoma. Pack and Schranagel[6] in 1951 reported 32 cases of malignant melanoma associated with pregnancy.

Read before the Section on Obstetrics and Gynecology at the One Hundred Second Annual Session of The Medical Association of Georgia, May 14, 1952.

This case is of special interest not only because of its rarity, but also because of the problem in differential diagnosis it presented.

Mrs. J. L. Y., 41 years of age, gravida six, para five, was referred to City-County Hospital, July, 1951 with the following admitting diagnosis: intrauterine pregnancy of six months, complicated by eclampsia. On admission, since the patient was comatose, the history was obtained from her husband. Past history revealed the usual contagious childhood diseases. There was no history of any serious illness until 1949 at which time she underwent a local excision of a pigmented mole just to the right of the umbilicus. This was diagnosed as a malignant, pigmented melanoma, and a radical dissection of the femoral and inguinal regions was done due to metastases to those regions. In 1950 palpable nodes were found in the right axillary region and along the right long thoracic nerve. A radical dissection was done in those regions. Pathological diagnosis of the excised regional nodes was metastatic melanoma.

Past pregnancies: the patient suffered with eclampsia during the last week of her first pregnancy and underwent an induction of labor. According to her husband, the delivery was completed by use of forceps, and the patient recovered uneventfully. The subsequent four pregnancies were uncomplicated.

Systems History: the husband stated that the patient had complained of sub-occipital headaches frequently for the past 24 months and had complained of attacks of vertigo and scotomata for the past 18 to 20 months. The patient had suffered with anorexia for four weeks prior to admission and had developed nausea and vomiting for 10 hours before admission. The patient's husband stated that she

had had a feeling that her legs were "giving way" for the past 12 months, especially on standing.

Present pregnancy: menstrual history and LMP unknown by husband. He stated that she had not seen her family physician until two weeks prior to admission. At that time the physician did an incomplete physical examination and prescribed no specific treatment. The patient continued her usual routine until five hours before admission at which time she had a convulsion (type unknown) followed shortly by three subsequent seizures. Following the first convulsion, she became comatose and remained so until admission.

Physical Examiation: T—98.4; P—100, R—28, BP—138/86. Eyes: pupils equal, regular, but dilated. No reaction to light or accommodation. Due to the patient's condition, ophthalmoscopic examination of the fundi was difficult, but the only significant change was that there seemed to be a definite blurring of the right optic disk. Lungs were negative to percussion and auscultation. Glands: there were no palpable regional nodes. There were scars over the right axillary and right inguinal regions and along the course of the right long thoracic nerve. Abdomen: the uterus extended up to one-fourth the distance from the umbilicus to the xiphoid process. Uterus was soft and non-tender. Fetal heart sounds were heard in the RLQ, 148 per minute. Liver and spleen were non-palpable. No ascites. Reflexes: right biceps were normal; left biceps were very hyperactive with a positive Hoffman's sign. Knee jerks were equal. Positive bilateral Babinski.

Laboratory findings: catheterized urine essentially negative except for two-plus albumin. Blood studies: RBC—3,270,000; Hb.—54 per cent; WBC—17,950; differential—90 per cent polys, 10 per cent lymphs. Uric acid—4.4 mg. per cent. Spinal fluid dynamics—IP 200mm, FP 180 mm following removal of 5 cc's of fluid. Spinal fluid was clear and colorless. There were 3—5 RBC and 3 WBC per cubic mm. Pandy was negative. Wright's stain of sediment negative. Total protein: 46 mg. per cent. Kahn negative. Report of x-ray studies of the skull, vertebrae, lung fields and rib cage was as follows: "There is an infiltration in the right lung etiology undetermined, and a calcification of the pituitary gland." A repeat x-ray of the lungs on the eighth hospital day was reported as follows: "Metastatic foci, both lung fields."

Following examination an internist was asked to see the patient in consultation. After a discussion of the common causes of convulsions and coma in this age group (e.g., acute cerebral vascular accident, eclampsia, epilepsy and metastatic malignancy to the brain) it was felt by both of us that this patient's convulsions and coma were caused by a metastatic brain lesion and that the prognosis was poor.

Patient was treated in routine supportive manner, including blood transfusions. She remained in a semi-comatose to comatose state until the seventh day at which time she regained consciousness for brief periods. Two days later she went into a deep coma and remained there until death on the 18th hospital day. A complete autopsy was performed, and the pathological diagnosis was as follows: malignant melanoma, brain, metastatic from right umbilical region; malignant melanoma, metastatic, lungs, bilateral; arteriosclerosis, coronary, marked; arteriosclerosis, generalized, moderate; pregnancy, intrauterine, 5½ months.



Fig. I. Metastatic Melanoma—Brain

SUMMARY:

1. A case is presented of a patient suffering with convulsions and coma during the sixth month of pregnancy.

2. The problem of differential diagnosis was discussed, and, after careful study, the following antemortem diagnosis was made: convulsions and coma caused by metastatic melanoma to the left parietal lobe.

3. Post mortem findings confirmed the premortem diagnosis, localizing the lesion to the left lenticulostriate region.

4. Immediate cause of death was probably terminal hemorrhage into the metastatic melanoma, left lenticulo-striate region.

BIBLIOGRAPHY

1. Weber, F. P., Schwarz, E., and Hellenschmeid, R.: British M. J. 1:537-539 (March) 1930.

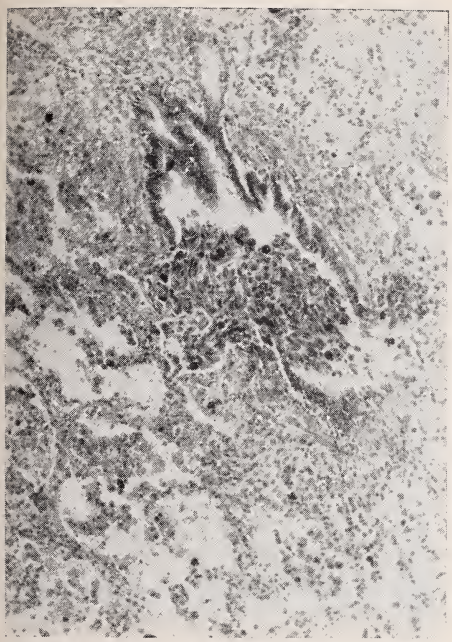


Fig. II. Metastatic Melanoma—Lung

2. Emmert, Max: Nebraska M. J. 22:471-473 (December) 1937.

3. Clayton, S. G.: Proc. Roy. Soc. Med. 39:578-579, 1945-46.

4. Holland, Eardley: J. Obst. and Gynaec., Brit. Emp. 56:529-536 (August) 1949.

5. Bender, S.: Brit. Med. 1:980-981, 1950.

6. Pack, G. T., Schranagel, I. M.: Cancer 4:324-334 (March) 1951.

DISCUSSION

DR. B. A. McCRUM, (Gainesville): Dr. Hendricks has very nicely presented this very rare occurance of malignant melanoma complicating pregnancy.

The surprising thing about this patient is that she was sent to the hospital as a diagnostic problem, since she was known to have had melanoma with spread to two regions of the body.

She apparently had wandered away from the care of the physician who knew her case history, and her next physician apparently took too little history to suspect real trouble. The end result would have been the same to the patient, but I imagine that the doctor has been jolted awake again to his medical school teaching of a good history and physical on every patient.

This patient demonstrates the usual grave prognosis after finding the original lesion. She lived between two and three years. She also demonstrates the early lymphatic spread and late blood stream metastasis with very little symptoms until the convulsions. Also x-ray of the lungs on admission showed infiltration in the right lung ,and eight days later spread to the left lung.

Pregnancy apparently has no affect on the disease and according to Dr. Hendricks' review of the literature, their occurance together has been extremely rare. We know that pregnancy and disease of the uterus and ovaries frequently give us chloasma in which a melaninlike substance is formed, giving brown patches in the skin of the face and elsewhere.

From the autopsy report it seems this moderately young woman would have had heart trouble starting just any time. It is my guess that her eclampsia was the start of her arteriosclerosis and had been continually aggravated by five other pregnancies.

DR. W. W. COPPEDGE (East Point): A pregnant patient having convulsions is presumed to have eclampsia until proven otherwise. This disease is almost never seen before the third trimester of pregnancy except in hydatid mole. Some of the other criteria of eclampsia such as elevated blood pressure, uric acid retention, and casts in the urine, along with the albumin, were absent here. The history in this case makes the diagnosis relatively clear, but many patients will not have this known background, as the first attack of epileptic like seizures not infrequently are exhibited during pregnancy or labor.

Had this patient lived another two to three months, a live baby probably could have been obtained, since, unless there is marked placental involvement, the fetus is not affected by melanoma.

Dr. Pack of Memorial Hospital in New York in *Cancer*, March 1951 states: "The transformation of benign nevi to malignant melanoma, the rapidity of their growth, their early dissemination, and the low rate of curability during pregnancy has not been generally known, largely because the personal experience of any one physician with this uncommon cancer has been too infrequent to project this fact upon his consciousness." For this reason Dr. Hendrick's paper is a valuable contribution, by pooling all of our knowledge concerning this distressing and baffling disease.

Of 32 patients at Memorial Hospital with melanoma and pregnancy associated, 14 or nearly 50 per cent, were dead within three years or less from the growth or its metastasis. Fifteen were treated within the past two years so therapy cannot yet be evaluated on them. The prognosis is bad and few cures are obtained when pregnancy is associated with melanoma or occurs within 3 years of apparent cure.

Pituitary, adrenal and gonadal hormones stimulate change of benign nevi into malignant melanoma as evidenced by their growth and dissemination during puberty and pregnancy. However, these factors influential in the induction of this malignancy do not necessarily contribute to its continued growth. All manner of hormone therapy, including suppression of natural hormones, has been tried but to no avail.

By the same token, termination of pregnancy has not been shown to be of any benefit whatsoever. Therefore, while pregnancy is strongly advised against within three years of an apparent cure of melanoma, interruption of a gestation is of no benefit as its evil influence on the malignancy is already established. Also, the chances of obtaining a normal healthy baby are good.

Melanoma differs from all other cancers in the widespread and nonselective localization of metastasis; that is, more frequently to brain, heart, gastrointestinal mucosa than any other tumor. Metastasis occur both by lymphatics and the blood stream. This was the case with Dr. Hendrick's patient and there obviously was no treatment for her when first seen by him. However, she apparently had had the accepted treatment of wide excision with dissection in continuity of the local gland areas.

These tumors are markedly radioresistant and radiation has no place in their therapy. While these tumors are extremely rare (Cosgrove at Margaret Hague reports an incidence of 1 in 122,000 pregnancies) prophylactic removal of pigmented moles during pregnancy should be done if (1) they are subject to irritation (2) on genitals or feet, as benign nevi are rare here but these are the most common sites for malignant melanomas (3) if they exhibit increased pigmentation, elevation or enlargement, ulceration, bleeding or pain (4) smooth blue, black or dark brown variety.

DAVID M. DAVIS, M.D., Philadelphia

Notes on

PROSTATIC SURGERY

and the

RESULTS

Which Should Be

EXPECTED *Of It*

Prostatic surgery began about the same time as human flight in aeroplanes, and has been marked by a similar steady, rapid and indeed spectacular progress.

In its early days prostatic surgery was very deadly. The reasons for this were manifold, and it is interesting today to see how the various causes of death have been cut down and eventually for the most part eliminated. Fifty years ago operations were performed only in desperate, far advanced cases, little or nothing was known about the effects of prostatic obstruction on kidney function, and there were only poor and inadequate means of dealing with ever-present infection and with post-operative hemorrhage. Lastly, the treatment of many intercurrent and complicating conditions, such as diabetes and cardiovascular disease, was much poorer 50 years ago than it is today.

In considering our present position, the most fundamental question is "what is the object of prostatic surgery?" One must answer that there are in the main, and omitting such infrequent conditions as abscess of the prostate and injury to the prostate, only two main objects of prostatic surgery, namely, (1) to relieve prostatic urinary obstruction, and (2) to cure early cancer of the prostate. Secondary objects of great importance are to avoid post-operative complications and to prevent fatalities. Each urologist should keep these objects clearly in mind at all times, and never allow himself to be diverted by enthusiasm for any particular method of operating.

Everyone knows that prostatic surgery becomes better and safer each year. It is well to stop and think why this is so. There are a number of reasons, roughly as follows:

1. Better pre- and post-operative care, with attention to fluid balance, electrolyte balance, nutrition, vitamin intake, and the giving of parenteral fluid, blood and plasma. It is hard to exaggerate the importance of this group of improvements.

2. Better methods for the treatment of intercurrent diseases, such as cardio-vascular disease and diabetes.

3. Early ambulation, the use of anti-coagulants and other methods for the prevention of thrombosis.

4. Better methods for the control of early and late post-operative hemorrhage. It should never any longer be necessary to open the bladder to arrest hemorrhage, as it can all be done instrumentally.

5. Better nursing care. The former reluctance of female nurses to care for urologic cases has been replaced by enthusiastic interest and technical competence.

6. The organization of resident staffs, which ensures competent care at all hours of the day and night, and prompt attention to emergencies.

7. The effective treatment and prevention of alkaline wound infections. This has proved to be very simple. Nothing is necessary but continuous irrigation with weak acid solutions.

8. The antibiotic drugs, which have practically eliminated the former *bete noir* of urologists, ascending renal infection or urosepsis.

9. Patients come in earlier for operation so that there are fewer of the terribly bad risks.

Please note that these nine reasons do not include

Read before the One Hundred Second Annual Session of the Medical Association of Georgia, May 12, 1952.

"improved methods of operation."

One point deserves special mention. Recently there have appeared a few advocates of immediate operation in cases with impaired renal function, provided no serious infection is present. Most cases so handled undoubtedly will survive, but this practice involves a certain added risk, which I think is neither necessary or justified. Renal impairment due to urinary obstruction depends upon decompensation of the ureters, that is, they can no longer conduct urine from the kidneys to the bladder in the normal way, nor under the normal pressure conditions. If such decompensation continues very long, the ureters become dilated and thoroughly incompetent, so that they afford an easy path for infection to follow to the kidneys. In such cases renal functional tests may return to normal very quickly after tube drainage by catheter or by suprapubic tube is begun, but it takes a much longer time for the ureteral dilatation to disappear and for normal peristalsis to be re-established. It is better and safer to wait until this time before operating upon the prostate, whether it be a week or several months. The state of the ureters can usually be ascertained by intravenous urography. While this conservative procedure may save only an occasional case, the mortality of prostatic surgery is now so low that no urological surgeon can afford to take even the remotest chance of an unnecessary fatality.

The mortality rate for prostatic surgery is a matter of great interest and also, it seems to me, an area of great confusion. I believe that it would be well, at this point in the history of medical progress and in the development of urology, to examine this subject very critically and establish some standard which all could recognize, and which every urologist would have to meet in order to be regarded as competent in this branch of his work.

In the beginning only the most desperate patients were operated upon, and the mortality rate, judged from the statements of those surgeons who lived through that era, was surely not far from 50 per cent. The drop in the mortality rate has been continuous and spectacular, yet the old notion that prostatic surgery was dangerous has persisted in many quarters. It still makes a good many patients fearful, and it still makes a good many doctors hesitate about recommending surgery. Furthermore, and sad to say, it still affects some urologists so that they are satisfied with mortality rates which are too high.

How high should the mortality rate be as of today? The work of Hugh Young did perhaps as much as anything to clarify the situation in the previous generation. His global operative mortality for 1,049 cases of perineal prostatectomy, from 1902 to 1922, was 3.4 per cent. However, there was a series of 128 consecutive operations in 1906, 1907 and 1908 without fatality, and another similar series of 198 cases running from 1919 to 1922. In the years from 1917 to 1922 inclusive, he operated upon 234 patients with one death, a mortality of 0.43 per cent. All this was before the days of antibiotics, and can be ascribed only to painstaking, competent work before, during and after the operation. E. G. Davis of Omaha has reported a series of 139 perineal prostatectomies without fatality.

Creevy has studied the subject and quotes Nesbit with a rate of 1.81 per cent in 2,425 transurethral resections, Thompson of the Mayo Clinic with a rate of 1.2 per cent in 11,522 transurethral resections, and himself with a rate of 0.6 per cent in 1,000 transurethral resections. Darget of Paris and Bordeaux joins this select group with a series of 180 transurethral resections with a mortality of 0.6 per cent.

Creevy further tabulates a great number of domestic and foreign surgeons with rates varying from one to 39 per cent for suprapubic prostatectomy and from zero (in a series of 65 operations) to 15 per cent for retropubic prostatectomy. All of these reports were made in the years 1945 to 1949. Terence Millin's own record for 757 cases of retropubic prostatectomy was, in 1949, 4.5 per cent. At the 1949 meeting of the International Urological Society in Barcelona, 10 surgeons reported their results. Serralach of Barcelona had 150 consecutive perineal prostatectomies without a death. The others had rates varying from 0.6 per cent to 18.15 per cent. Perhaps the best series of 100 or more retropubic operations to date is that of Thomas Moore of Memphis, whose rate is 1.7 per cent.

Along with these figures the thoughtful urologist must also consider the number of the patients who seek relief, but die before any operation can be performed on the prostate gland. In 1949 Galbraith of Glasgow reported this figure at 20 per cent. In the years 1936 and 1937, at the Jefferson Hospital in Philadelphia, on my own service 22 per cent of the ward patients admitted for prostatic obstruction died before the prostate could be operated upon, and in spite of our best endeavors. Patients in this class are seldom referred to in articles on prostatic surgery, and yet their deaths are just as tragic as those subsequent to operations on the prostate. However, it must be very obvious that the number of patients failing to reach the operating table is at the present time nothing like 20 or 22 per cent of the whole. Actually a revolution has gone on right under our noses, and we are only beginning to wake up to it. In a series of 447 of the most recent of my own patients, only a single one has not had an operation on his prostate, and he is alive and in good condtion, with urinary drainage through a suprapubic tube which he apparently does not wish to get rid of as he will not return for further operation. The preoperative mortality on the ward service is greatly reduced, but unfortunately lack of time and of assistance have prevented me from ascertaining the exact figures.

This desirable state of affairs is due obviously to two reasons. First, the number of

very advanced cases, with severe renal damage and poor general condition is greatly reduced owing to the increased willingness of physicians to recommend early operation, and the increased willingness of patients to accept that advice. This change of attitude is due to the better results of surgery, so that we have here a beneficent circle which will no doubt go on improving matters more and more. Second, the chances of salvaging the bad risks have been increased in spectacular fashion by the antibiotic drugs. It seems likely that they have done much more good, proportionately, in this field than they have in saving lives in the post-operative period. While the post-operative mortality in the hands of the best operators has been really good for more than a quarter of a century, we can now say, and we should never cease to affirm it energetically, that practically every person suffering from prostatic obstruction, whether he be good risk, indifferent risk, or bad risk, can now be brought successfully through an operation.

What, then, should the mortality be in prostatic surgery? Not 50 per cent, nor 30 per cent, nor 15 per cent, nor even five per cent, which was considered pretty good 25 or 30 years ago. Should we be satisfied with four per cent, or three or even two per cent? I believe not. The three largest series of transurethral resections yet reported all show a mortality below two per cent. Creevy's series of 1,000 transurethral resections and Young's series of 234 perineal prostatectomies are both well under one per cent. I know of no sizable series of suprapubic prostatectomies with less than one per cent of fatalities, but I can see no reason why this operation should not be as safe as any other. For my own part, I can offer a series of 500 consecutive operations on 446 patients without any fatalities. Of these operations, 377 were transurethral resections, 104 were perineal prostatectomies, 13 were radical perineal prostatectomies for early carcinoma, five were suprapubic prostatectomies and one was a retropubic prostatectomy. All cases seen were subjected to prostatic operation, except one man who, after suprapubic drainage, refused to return for further operation. It seems reasonable, therefore, to state that the mortality in prostatic surgery today should be under one per cent, that every urological surgeon should aim to do this well or better, and that a rate rising above one per cent indicates that some details of the treatment are being neglected or incorrectly handled. I should personally like to see an end of published articles in which death rates of four or five per cent are regarded with equanimity.

It is quite obvious that all the recognized methods of operating upon the prostate are good methods, and will produce good results in competent hands. It is no longer necessary to labor this point. Since each operative method is said to have, and undoubtedly has, certain advantages, it is absolutely essential that those who pretend to train young urologists instruct them adequately in the performance of operations by all the known methods, so that they will be able freely to choose the operation best suited to each case, and not be influenced by prejudice in favor of any certain method, or by any feeling of inadequacy in respect to any certain method. Only in this way can urology as a specialty escape the charge of an unscientific particularism.

Let us comment briefly on each method. It has been clearly and repeatedly shown that transurethral resection must be performed so meticulously that every smallest bit of obstructing tissue is removed as completely as in any other operation in order to obtain good results, and that the surgeon must in addition know his field so well and keep so perfectly oriented at all times that no errors involving a cut in the wrong place are made. This requires extreme skill and much experience. So performed transurethral resection has the advantages of short hospital stay and no skin incision to heal. Incontinence does not follow unless there are gross technical errors. Its disadvantages are that it grows more difficult and time consuming as the amount of tissue to be removed increases, and that there is the possibility of overloading the circulation with fluid flowing in through the operative field, whether or not hemolysis and hemolytic lower nephron nephrosis occur. In addition it is not suited to the cure of early carcinoma, or to the obtaining of tissue for the diagnosis of early carcinoma by frozen section. Very obviously it should not be the only method at the disposal of the urologist.

Under modern conditions suprapubic prostatectomy is a good and safe operation. Its advantages are that it makes rectal injury unlikely, and appears to preserve sexual function a little better than perineal prostatectomy, but not as well as transurethral resection. Its disadvantages are that it is not suited to the cure of early carcinoma or to the obtaining of tissue for frozen section, and that since it involves an incision through the abdominal wall, incisional pain diminishes mobility as well as coughing and throat-clearing during the early post-operative period, which introduces some slight additional dangers for old, weak, or otherwise poor-risk patients.

Retropubic prostatectomy has the advantages that it can be performed with few assistants, that it appears to be less shocking and less disabling during the early post-operative period than suprapubic prostatectomy, and that in many cases healing is early, and hospital stay short. In addition radical prostatectomy can be carried out by this method, but it should be noted that in doubtful cases no frozen section can be made until after the membranous urethra has been divided, a distinct disadvantage should the suspected area prove not to be malignant. Furthermore, it is very difficult from this approach to anastomose the bladder with the membranous urethra. Other disadvantages are that hemorrhage from the anterior part of the prostate may be troublesome, and that osteitis pubis appears to occur fairly frequently. It should be said that no one as yet has reported any extensive series of retropubic prostatectomies with an overall mortality as low as that in

many reported series of transurethral, suprapubic or perineal operations.

Perineal prostatectomy has the advantages that, as in transurethral resection, there is no abdominal incision, that it is performed under direct vision, that hemostasis by suture is easy and practicable, that early ambulation, even in the old and weak, is possible, and that material for frozen section is easy to obtain without dividing the membranous urethra or doing any other damage. The tissue is obtained from the posterior aspect of the prostate, where most cancers occur. In addition, if the suspected area proves to be malignant, radical prostatectomy can be immediately carried out through the existing incision.

This matter of radical operation for early carcinoma is a very important one and is attracting a rising tide of interest. Only if urologists generally advocate and push the method at every opportunity, and instruct the profession generally in the way to discover suspicious cases by routine digital rectal examination can we hope to make real progress. The operation, it has already been shown, will give good results in better than 50 per cent of cases; it is only necessary to have more early diagnoses.

There should be a word of caution about the pathological diagnosis. The metaplasia occurring around infarcts of the prostate, as well as other changes seen in hyperplastic or chronically inflamed prostates, or those which have been subjected to radiation or to electro-coagulation may give rise to pictures easily mistaken for carcinoma. The microscopic diagnosis should be undertaken only by those trained and thoroughly competent in this particular field.

The disadvantages of perineal prostatectomy are that three or at least two competent assistants are desirable, that rectal injury can occur, and that there is a little more likelihood that sexual function will be suppressed. It is claimed that incontinence of urine is more likely to occur, but careful studies indicate that this complication is no more frequent than after suprapubic prostatectomy. It should be stated that the perineal approach is no more difficult technically than any other, and that anyone who pretends to be a competent surgeon can operate by this route if he will take as much trouble to learn the anatomy as he does in other regions. The disinclination of many urological surgeons to operate perineally is hard to understand, and it is hoped that this prejudiced attitude will soon disappear.

A word as to end results. Transurethral resection is not always complete and must therefore sometimes be repeated. The 10 to 17 per cent re-operation figure reported by various surgeons represents pretty accurately the fraction of the cases in which not wholly satisfactory functional results are obtained. The number in which results are not satisfactory after the second operation remains very small, not over one or 1½ per cent. Regardless of the operative method used careful follow up treatment produces good results in almost every case. The goal to be sought is (1) normal bladder capacity, (2) normal intervals of voiding, (3) absence of discomfort, (4) normal rate of flow through the urethra, that is 22 c.c. per second or better, and (5) sterile urine. Postoperative dilatations and other follow up treatment may be necessary at times, and should always be given if indicated.

Certainly at this time and in this country no one should be satisfied with an overall mortality rate which is not considerably less than one per cent. Every fatality should be most carefully studied to see if it was not in some way preventable. I believe that every urologist doing prostatic surgery should single-mindedly view his results, selecting his technical methods to obtain the best results, and for no other reason whatsoever.

REFERENCE

The Arrest of Hemorrhage Occuring after Operation on the Prostate; Journal of Urology, vol. 59, 4:583-586 (April) 1948.

PRESS COMMENT: *Hippocratic Oath*

The modernization of the Hippocratic Oath by the World Medical Association, known as the Declaration of Geneva (1948), is known to very few and is worthy of note. It runs—

Now being admitted to the profession of Medicine, I solemnly pledge to consecrate my life to the service of humanity. I will give respect and gratitude to my deserving teachers. I will practice medicine with conscience and dignity. The health and life of my patients will be my first consideration. I will hold in confidence all that my patient confides in me. I will maintain the honor and noble traditions of the medical profession. My colleagues will be as my brothers. I will not permit consideration of race, religion, nationality, party politics or social standing to intervene between my duty and my patient. I will maintain the utmost respect of human life from its conception. Even under threat I will not use my knowledge contrary to the laws of humanity. These promises I make freely and upon my honor.

Richard Richards, M.D.
Milwaukee Medica Times

Special Articles

EDGAR M. DUNSTAN, M.D., Atlanta

Civil Defense Health Services Plan SUPPLY

Introductory Remarks

As we complete the series of articles marking the end of the organization phase of the Civil Defense Health Service Plan, it has been thought wise to present this article as a brief summary primarily to give an overall perspective and to show the soundness of the basic pattern upon which can be built the many detailed phases of the long range program. Of necessity, some of the opinions will have to be my personal ones and subject to revision. There is, of course, the danger of over-simplification considering the confusion that is bound to occur immediately following a major disaster, but this will be risked here because of the compensating powerful morale stimulus which knowing what has to be done and how to do it has on the character of a free society. American Medical Association and Federal Civil Defense Administration authorities have commented very favorably on our plan. To conserve space and time, the outline form will be used as much as possible.

Supply

At the outset it must be stressed that the State has not as yet set up sufficient matching funds that will enable us to take full advantage of Federal Government assistance in stock-piling of supplies. This should not, however, in any way interfere with the intensive training phase of the plan which now begins. In the first place, much of the training can be carried out with supplies and equipment that can be improvised. Secondly, there is a reserve supply that can be tapped if disaster should come before our own stock-pile is complete. Thirdly, it is not contemplated to stock-pile at the local levels; it appears more reasonable and economical to establish one central moderate stock-pile which can serve the State as required. The important point in this connection is to set up the distribution system so that it will be ready to function when needed.

Locally, therefore, the key word is IMPROVISATION. The manual "Organization of an Improvised Civil Defense Hospital" prepared by Dr. Charles Eberhart, gives the details of how this should be done. Special attention is called to the references in this manual about obtaining local drug store supplies in case of a civil defense emergency, neighborhood equipment survey and methods of storage, assembling in physicians' homes of minimal specified emergency professional equipment, improvisation of stretchers, bandages, lighting, feeding, water storage and waste disposal equipment, and many other useful references.

Hospitals throughout the State have been asked to increase their reserve supplies by at least 75 per cent and preferably have a three months' reserve supply on hand at all times. Since they are the logical distribution centers, they should set up an efficient distribution system which will go into effect when called upon to be the intermediaries in distributing stock piled supplies to their improvised hospital system. Hospitals will also be expected to assist by furnishing demonstration equipment and supplies for the intensive training of their affiliated improvised hospital units in the schools.

The Health Supplies Branch of the Georgia Civil Defense Health Service Division is preparing plans for the moderate central stock-pile mentioned above. The Branch has on its staff competent commercial advisors on equipment, supplies and drugs so that it can go into action in this connection at the proper time without delay.

Since Atlanta is the headquarters of the Southeastern (No. 3) Region of the Federal Civil Defense Administration, it is anticipated that in time there will be established near this city one of the regional stock-piles of equipment and supplies. The existing

mutual assistance pacts with the other Southeastern states will provide for some help in time of emergency. In the meanwhile, the Army has one of its main supply depost at nearby Conley, Georgia, and presumably can be expected to furnish initial emergency supplies until other resources can be mobilized.

Operations

(See chart on following page)

State of Continuous Relative Readiness: If the intensive training phase of our plan, which is now beginning, accomplishes its objectives at an early date, we may expect the following:

1. The Parent Teacher Associations throughout in the State, working intimately with Local and State

nd OPERATIONS

Civil Defense Directors, will see that:

a. Every home in the State has at least one person who has had the Red Cross First Aid course, has the recommended civil defense first aid kit and "Instructions for Survival Under Atomic Attack" in its shelter area, and that there are extra cots and supplies available for emergency use.

b. Every city block, or its equivalent in the rural areas, has set up its own block first aid station under the direction of the Block Warden, and has at least one person trained in the Red Cross home nursing course and one in the nurses aid course, working from this as headquarters.

c. With the assistance of the school staff, grammar and high school district personnel throughout the State have been organized and trained to operate their schools as improvised hospitals, know their training manual well, understand their relationship to each other, are receiving continuous professional and technical assistance from the existing parent hospital with which they are affiliated, are having regular training sessions and periodic "dry runs" and the key personnel are participating actively in the respective civil defense health service school and learning about vital relationships with other civil defense services.

2. Hospitals throughout the State will have formulated their respective disaster plans including provision for their own area and personnel, the use of surrounding buildings, and maintain intimate training liaison with their respective improvised hospital system in the schools. They will have accumulated a three months' reserve supply; trained additional technical personnel to the limit of their resources; assisted in the training of dentists and other personnel in emergency treatment procedures; provided for continuous professional and technical instruction and advice on improvisation of supplies to their affiliated improvised hospital systems; the outlying hospitals will have prepared and have on hand a reserve of obstetrical packs; the personnel are thoroughly familiar with the hospital training manual, participate in frequent hospital disaster meetings and "dry runs", and the trustee appointed Civil Defense Chief of Staff and other key personnel participate actively in the monthly training sessions of the respective civil defense health service school. They will also have arranged for two-way radio communications with the civil defense local control centers and between each other, and, as much as possible, with their improvised hospital units.

3. The Local and State Civil Defense Volunteer Health Services Corps have been appointed, are actively engaged in self-training and training the self-help and neighbor-help groups in the improvised hospital system, and have developed standard operating procedures for their different units.

4. The American Red Cross has stepped up its program of training in the first aid, home nursing and nurses aid courses and is keeping up with the increased demands.

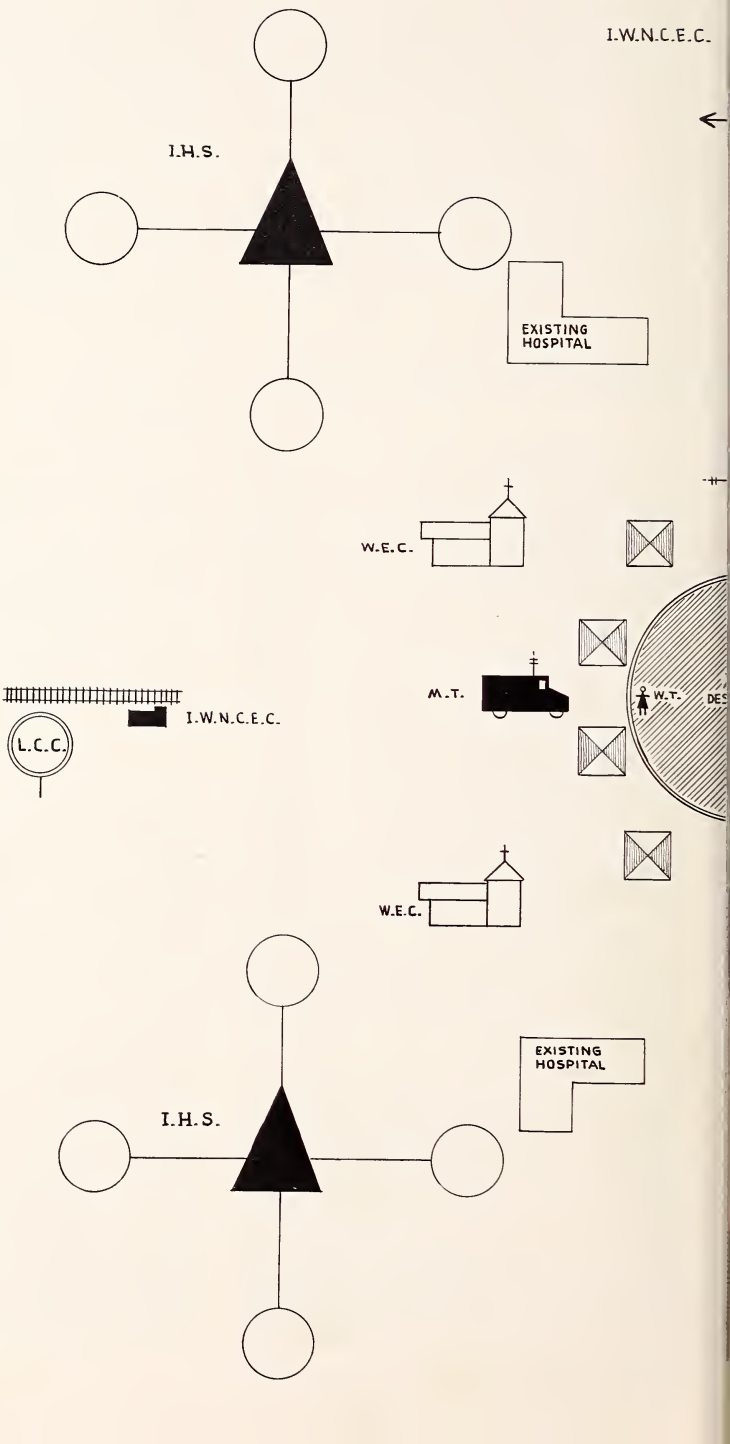
5. The Welfare Department will have provided for the setting up of main non-casualty evacuation centers near railroads at the periphery of cities and other subsidiary centers as mentioned below, and will have provided for establishment of emergency welfare centers in all churches and other specified places all of which will have made provisions for establishment of a first aid station. The church personnel will have been trained in operating these centers and the pastors and key assistants will have been trained in basic disaster psychiatry and will have been preparing their congregations psychololegically with the objective of minimizing panic.

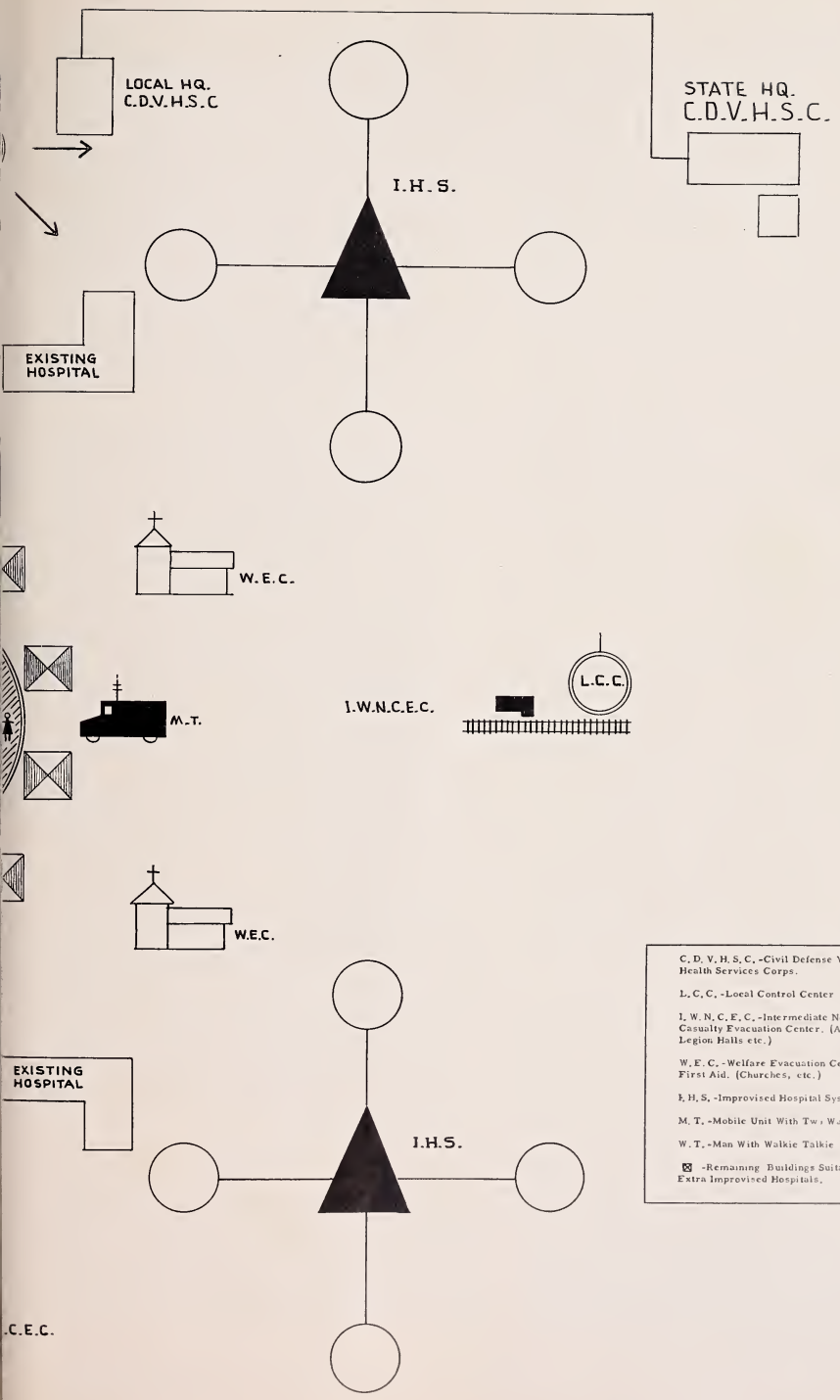
6. The Georgia American Legion Posts and their Women's Auxiliaries will sponsor or co-sponsor the welfare non-casualty evacuation centers and the mobile first aid units; they will have worked out plans for the use of their buildings as welfare non-casualty evacuation centers, and will set up here improvised supplies for first aid stations and emergency hospitals; they will have recruited, organized, and trained the affiliated mobile first aid units; they will have assembled, improvised, and stored the minimum equipment needed to operate these units; and they will have cooperated with the high school faculties, colleges, and boy scout organizations in training of great reserves for the litter bearers and medical corpsmen pool.

7. The two medical schools will have assisted continuously in standardization and will have trained all of their students, and as many of their premedical students as possible, in first aid and basic laboratory procedures so that they can function as a reserve pool wherever needed in time of disaster.

8. The Women's Auxiliary of the Medical Association of Georgia and its affiliated county medical auxiliaries and the Better Health Council, where there are no auxiliaries, will have: co-sponsored district and local civil defense meetings at which the medical profession, representatives of the Parent Teacher Associations, the hospitals, the American Red Cross,

SUPPLY and OPERATIONS





C, D, V, H, S, C, -Civil Defense Volunteer Health Services Corps.

L, C, C, -Local Control Center

I, W, N, C, E, C, -Intermediate Non-Casualty Evacuation Center. (American Legion Halls etc.)

W, E, C, -Welfare Evacuation Center, with First Aid. (Churches, etc.)

I, H, S, -Improvised Hospital System

M, T, -Mobile Unit With Two Way Radio

W, T, -Man With Walkie Talkie

⊠ -Remaining Buildings Suitable for Extra Improvised Hospitals.

the American Legion Posts and their auxiliaries and the Welfare Department will have met with the local civil defense directors and their health services staffs, and as a result put the recommended uniform Georgia Civil Defense Health Services Plan in operation throughout the State; worked actively in liaison work between the Parent Teacher Association and the parent hospitals through hospital auxiliaries, the respective Civil Defense Health Service Schools, and otherwise to expedite the training program in the affiliated improvised school-hospitals; kept in close touch with the Women's Auxiliaries of the Georgia American Legion Posts to stimulate continued interest in their vital assignments; had their membership take the Red Cross first aid and instructors course and volunteered for active duty as instructors; had as many of their membership as possible take the Red Cross home nursing and nurses aid courses; and provided continuous stimulation to the Federated Women's clubs, and other civic and church groups to mobilize the population at large behind the plan, resulting in prompt enlistment for training in the Red Cross courses and volunteering for immediate assignment in the P. T. A. improvised school-hospital program.

Operations in Case of Disaster: The degree of implementation will depend on the extent of the disaster. Assuming full implementation:

A. *State at Large*: mobilize to receive casualties and stand by to send aid as directed by the State Civil Defense Director.

B. *Non-destroyed Portion of Target Area*:

1. The trained self-help and neighbor-help groups will listen for radio instructions from the city control centers and, as soon as possible, will proceed to their stations in the respective improvised school-hospitals and set these up for receiving casualties. Some of the personnel in the more peripheral hospitals may be temporarily ordered by the control centers to assist in setting up additional improvised hospitals nearer to the disaster area.
2. Remaining hospitals will put their disaster plans into full operation.
3. The Local and State Civil Defense Health Services Division Staffs will proceed at once to their respective control centers.
4. The Local Civil Defense Volunteer Health Services Corps personnel will proceed at once to their assigned stations or, if this is impossible, to the nearest control center.
5. The designated peripheral hospitals will rush obstetrical packs to the existing improvised school-hospitals nearest the disaster area and to the other evacuation units in the line of evacuation, to be used as needed as the evacuation of the 8th and 9th month pregnant women and children below the 7th grade proceeds.
6. During this time the control centers, where are assembled representatives of all the civil defense services, have ascertained the extent of the damage and are in constant communication with mobile two-way radio trucks at the disaster scene and monitors with walkie-talkies, etc. If the disaster exceeds the local capacity to take care of it, the local civil defense director asks for aid from the state civil defense director. Units of the State Civil Defense Volunteer Health Services Corps will then be ordered to report to the local civil defense director and his health services deputy and remain under his direction until released. The mobile first aid units ordered in will bring in the additional litter bearers and medical corpsmen which may be required. The local control center, in consultation with the state control centers, will jointly determine the extent of evacuation that will take place and issue directions accordingly.

C. *Bombed Area*:

1. The trained self-help and neighbor-help personnel who are not injured will report to the nearest intact homes for a depth of three or more blocks and there assist in setting up first aid stations, duplicating the block warden first aid stations in each home. The disaster area should be "ringed" as soon as possible with these to give first aid to the great number of casualties and act as "filters" for the school-hospitals. By this time the control centers have radioed instructions to set up additional improvised hospitals in existing buildings near the disaster area, and the personnel available will proceed to do this at once. The remaining non-injured personnel will then act as litter bearers bringing the injured to these first aid stations and improvised hospitals.
2. Individuals who were stunned but not physically injured will be taken to the welfare centers in the churches and other designated places and there will receive the spiritual and psychological help which will enable them soon to assume active roles in the care of the injured, putting out fires, and other civil defense services which will be urgently needed.
3. The physically injured, as mentioned, will be taken by the above mentioned personnel, supplemented by litter bearers and other personnel sent in by the control centers, to the first aid stations "ringing" the disaster area. After first aid treatment many may be able to join in the care of other injured people. The others will have to be admitted to the improvised hospitals or evacuated.

Conclusion

As can be seen, the flexibility of the Georgia Plan rests on the fact that self-help and neighbor-help personnel will be thoroughly trained in their duties and will receive continuous professional and technical guidance by the civil defense volunteer health services corps units based on existing parent hospitals so that they will be able to function in any type of disaster that may occur.

USEFUL REFERENCE MATERIAL

Organization of Improvised Civil Defense Hospital, by Charles Eberhart, M.D. A training manual. January, 1952.

Health Services and Special Weapons Defense, Federal Civil Defense Administration Publication AG-11-1, Washington, United States Government Printing Office, 1950. This gives the basic organization of the Civil Defense Health Services followed uniformly in Georgia.

Hospital Disaster Plan Guide, by Dr. Frank Cole, California State Department of Public Health, San Francisco, Cal. In preparation.

Hospital Disaster Planning Manual, by Dr. L. H. Muse. A training guide. Includes examples of plans for hospitals of various sizes. In preparation.

Disaster Plan of Massachusetts General Hospital, by Nathaniel Faxon, Medical Director, Boston, Mass.

Proceedings of the Medical Civil Defense Conference, Chicago, Nov. 9-10, 1951. Sponsored by the American Medical Association, American Hospital Association, and the Association of State and Territorial Health Officers (includes article on "Hospital Civil Defense Planning" by Anthony W. Eckert).

Eberhart, Charles, M.D., "Medical Aid Plan for Civil Defense, Metropolitan Atlanta Area," *Journal of the Medical Association of Georgia,* 481-483, Nov. 1951.

Dunstan, Edgar M., M.D., "Civil Defense The National Medical Conference and the Georgia Health Service Plan," *Journal of the Medical Association of Georgia,* 21-24, January, 1952. A good outline of the Georgia Plan may be found here.

Dunstan, Edgar M., M.D., "Appointments in the Georgia State and Local Civil Defense Volunteer Medical Service Corps," *Journal of the Medical Association of Georgia,* April, 1952.

Dunstan, Edgar M., M.D., "Central Civil Defense Health Service School," *Bulletin of the Fulton County Medical Society,* May, 1952.

Eckert, Anthony W., "Partners in Crisis-Hospitals and the Press," *Hospitals,* September, 1951.

Eckert, Anthony W., "Perth Amboy's Disaster Plan Goes into Action," *The Modern Hospital,* March, 1951. The details of the plan are given in this article.

Eckert, Anthony W. and Ridell, David T., "Disaster Preparation: A Prayer or a Plan?", *Hospitals.* April, 1952.

Petrie, Lester, M.D., *"Self-Help and Neighbor-Help,"* *Journal of the Medical Association of Georgia,* 62-64, February, 1952.

Eckert, Anthony W., "When Disaster Struck We Were Prepared," *Hospitals,* September, 1950.

Bartholomew, Muse, Blalock, Skobba; Professional Management of Non Casualties, in preparation. Ibid, Management of Non Casualties, a training manual for Laymen. In preparation.

RELATED MATERIAL

Dowman, Charles E., M.D., "Possible Atomic Bomb Effects Applied to Atlanta," *Journal of the Medical Association of Georgia,* 476-481, November, 1951.

Dowman, Charles E., M.D., "Casualty Handling in Emergencies," *Journal of the Medical Association of Georgia,* 109-113, March, 1952.

Dunstan, Edgar M., M.D., "What Every Georgia Physician Should Know About Civil Defense," *Journal of the Medical Association of Georgia,* 426-432, November, 1951.

PRESS COMMENT:

Family Doctor is Important

The family doctor is an important personage in the community. Here is what the New York Herald Tribune has to say about him:

"The Family Doctor of 1951 doesn't seem too different in demeanor or in devotion from the family doctor of 1851. The 1951 title has just been awarded to Dr. Percy G. Waller, of New Baltimore, N. Y., a community of 1,000 inhabitants in Greene County. Dr. Waller is 81-years-old and the proud wearer of a stiff collar and white sideburns. He has been practicing medicine for 57 years, and he still makes his calls in a horse and buggy when the snow on the upstate roads piles too high for those treacherous automobiles.

"It's nice to see a family doctor honored, especially one who fits into the traditional concept of the elderly, benevolent general practitioner as neatly as Dr. Waller does. These are the days when the specialists and experts get the publicity, in medicine and other sciences; one forgets that the physician who ministers to all the needs of a community or a neighborhood is still very much around.

"The folks up in Greene County probably never realized that they had in their midst the Outstanding General Practitioner of New York State for 1951—to use the official designation conferred by the Medical Society of the State of New York. They only knew that when you got sick you sent for Doc Waller, that he always came no matter what the weather, and that you somehow felt better after he'd been to see you. That's what the fancy title really means, and Doc Waller would be the first to say that it can be wor nproudly by many physicians in our state."

In these days there are many specialists in the field of medicine. There is a doctor for this and there is a doctor for that, depending upon the symptoms. If you don't know what the symptoms mean, there is a doctor for that too—the diagnostician.

But the family doctor is still an important institution especially in the smaller towns or rural sections.

—Columbus Enquirer

The Association

Abstract of Proceedings of

THE COUNCIL

of the

Medical Association of Georgia

at THE 102ND ANNUAL SESSION

in Atlanta, May 11-14, 1952

May 11, 1952

The first session of the Council of the Medical Association of Georgia, held at the Atlanta Biltmore Hotel, Atlanta, convened at 11 a. m., Dr. W. G. Elliott, Chairman, presiding.

The following were present:

W. F. Reavis, Waycross, *President*
C. F. Holton, Savannah, *Vice President*
David Henry Poer, *Secretary Treasurer*
D. Loyd Wood, Dalton
Lee Howard, Savannah
C. K. Wall, Thomasville
J. W. Chambers, LaGrange
Clarence B. Palmer, Covington (Alternate)
Guy J. Dillard, Columbus (Alternate)
Marion C. Pruitt, Atlanta
H. D. Allen, Jr., Milledgeville
Sage Harper, Douglas
W. Bruce Schaefer, Toccoa
H. L. Cheeves, Union Point
J. Victor Roule, Augusta (Alternate)

CHAIRMAN ELLIOTT: May we come to order, gentlemen. What is the first order of business?

SECRETARY POER: We have several things on the agenda this morning. The Committee on Appropriations and Audits have a report to make. Drs. Chambers, Cheeves and Schaefer are on that Committee.

PRESIDENT REAVIS: We all received a copy of the proposed budget.

SECRETARY POER: I believe all members of the Council also received a copy of the auditor's report. I would like to call your attention to one sentence in it.

In the report from Ernst & Ernst it states, in the next to the last paragraph, "Salaries paid employees of the Association are not authorized or mentioned in the meetings of the Council or the House of Delegates, as required by the By-laws of the Association."

I called the Auditors to find out exactly what he referred to. He stated that it was a matter of wording at the first meeting of the Council, at which it was stated that the salaries would be paid as had been done in the past.

If we look at the bound Journal, in the minutes of the meeting of the Council in Atlanta on May 20, 1951, paragraph 12 states, "The current salaries of all employees . . . were approved." To meet the requirements of the auditors, Mr. Chairman, I think a motion would be in order, that the salaries paid during the year be approved by Council as stated in this letter.

DR. WALL: I make that as a motion.

PRESIDENT REAVIS: Second. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: Do you want to report for Budget committee, Dr. Cheeves?

DR. CHEEVES: Dr. Poer, I don't think there is anything to add to the report. All of you received copies of the budget and have had a chance to study it. We spent many hours on it. It doesn't seem that it would require discussion.

We tried to stay within our means, and have just a little left over for things that come up that we don't anticipate.

SECRETARY POER: Do you want to go over the items? Maybe someone has some questions to ask you.

DR. CHEEVES: If anyone has any questions I will do my best to answer them and explain as best I can.

DR. PRUITT: This is very important. Let's go over it item by item so there can't be any question. This is one of the most important pieces of business we have. If we don't have this we don't have anything.

DR. WALL: How does our income from dues compare to the revenue from dues?

DR. CHEEVES: It is just a little more. We followed pretty closely the outline the auditors had, except that we didn't go into some detail that they went into.

DR. PRUITT: You haven't anything as a comparison. Both of them should be read. What is the difference between the dues this year and the dues last year?

DR. WALL: Last year we had $3,619; this year they propose $3,000 on which to base the budget.

DR. CHEEVES: I might say that in arriving at these figures we tried to put them at rock bottom, in the hope that we would go over some of the items in our income. Dr. Poer gave us a lot of help on these things, as to what we would need for the coming year, especially item 6, committee expenses, and so on.

In the recommendations, the first part was primarily for the moving picture machines that we have, which have not been used. I know the one in my district probably has been used four times since we purchased it. There is a lot of money tied up in unused property.

DR. WALL: We wore ours out. We want a new one.

DR. CHEEVES: You can have ours; it's almost new.

DR. WALL: Ours has been used a great many times. The Public Health officers have used it in a lot of schools and at medical meetings and county fairs. They put on health

pictures, and that sort of thing, and we really need a new one.

DR. HOWARD: We have never had a machine. Cleve Thompson has had it and I have written him and your office, I have never been in possession of one.

SECRETARY POER: Dr. Howard, we will have to take that up with Dr. Thompson, if we can, during the meeting. That was one of the reasons why we wanted to get this property into the office.

When I took over I found the Association had a large amount of money tied up in equipment like that. Some of it was being used; some of it never reached the place it was supposed to go. I think we have now reached the point where equipment like that can be rented, and you can get an operator with the machine in a more economical manner than if the Association owns it and uses it only a few times in several years.

We would like to liquidate that property and turn the funds into the general Association ,and allow the 2nd District, if they wish to buy it, to have the first opportunity, and we will sell it to you at a very low figure.

DR. WALL: We don't want that; we want a new one. We want the one Dr. Cheeves has.

SECRETARY POER: We can do that. We don't want to make any money out of it, especially if a county or district society wants one. We have a lantern slide projector downstairs that is a beauty. It has not been out of the office all year. It certainly would pay us to rent one for the one time we need it, than to have all that money tied up in it.

I feel sure Fulton County would like to buy that projector, as well as a motion picture projector. I brought this up several times during the year, that is, concerning this property, and the Coommittee on Appropriations agreed that we would at least bring the matter before Council, to consider liquidating the property of the Association that is not in use.

DR. ALLEN: Aren't these machines about ten years old?

DR. WALL: I know mine is about ten years old. It came to me my first year as Councilor.

DR. HOWARD: Ours hasn't been used in seven years.

SECRETARY POER: If your District wants it back they certainly may have it.

For those societies where the equipment is a total loss—for instance, Marion, I don't believe you have had occasion to use ours because Fulton County had one.

DR. PRUITT: They used it a great deal up to one or two years ago.

SECRETARY POER: We will offer it to the District and county societies first, if that meets with your approval, and then the members may have a second chance. We will get a fair price for them, and if there are no purchasers from those two groups we will offer them for general sale or to some company that will take them off our hands. We don't have an operator here, that is, any one of us, who is familiar enough to keep the equipment in shape.

PRESIDENT REAVIS: Mr. Chairman, I think this matter of equipment, some of it in good shape and others not, should be left entirely to the incoming Council for disposition.

SECRETARY POER: Would you want to recommend it to the Council, to give them something to start on?

PRESIDENT REAVIS: I recommend it, yes, and I recommend that the matter of the projector machines be left entirely to the incoming Council.

SECRETARY POER: Without recommendation?

PRESIDENT REAVIS: Yes. You don't know what condition these machines are in. Have them checked over when they come in.

DR. WOOD: I will get mine in this afternoon or tomorrow.

SECRETARY POER: I think two or three came in during the morning. Up to then the one from the 2nd District was the only one we had.

DR. CHEEVES: The 10th District machine came in this morning because I brought it.

PRESIDENT REAVIS: The 6th and 8th Districts, too, brought theirs in.

CHAIRMAN ELLIOTT: The 3rd District's machine I have been trying to get for six months.

First Committee Report

A brass ring goes to the Committee of Abner W. Calhoun Lectureship for the first report of the year. They have reported that Dr. Cyrus Sturgis, Professor of Medicine, University of Michigan will be the guest speaker for the MAG Annual Session, Savannah, May 10-13, 1953. Dr. Daniel C. Elkin is chairman of the committee.

DR. WALL: Dr. Reavis, if you make that as a motion I will second it.

PRESIDENT REAVIS: I make it as a motion; that the matter of the disposition of these machines after their return to the central office be left for handling by the incoming Council.

DR. ALLEN: Second the motion. *The motion was put to a vote and was carried unanimously.*

CHAIRMAN ELLIOTT: Do you have any further report on the budget?

DR. CHEEVES: Not unless someone has further questions.

PRESIDENT REAVIS: I move the adoption of the budget.

DR. WOOD: I second the motion. *The motion was put to a vote and was carried unanimously.*

PRESIDENT REAVIS: Gentlemen, in adopting this budget you understand we are proposing this budget to the House of Delegates. They have to make the final decision on it. We don't.

DR. WALL: All we can do is approve it.

PRESIDENT REAVIS: That's right; we approve it.

SECRETARY POER: Do you want to present the matter of the American Medical Education Fund? Do you want to present your thoughts about you and Dr. Holton recommending to the House of Delegates that we contribute to that National Fund?

PRESIDENT REAVIS: I don't know that it is necessary to bring that up before the Council. We should recommend to the House of Delegates that it be done. If they approve it, Council will have to take action on it afterwards. We have nothing to do with it now until it has come before the House for action.

SECRETARY POER: I thought it might be well if the Council would be informed. The action will come up before the House of Delegates this afternoon. As a matter of information, perhaps you and Dr. Holton and all of us have agreed as to a plan that we think should be followed, for information only.

PRESIDENT REAVIS: I think most of the Council is familiar with it. The proposal was that the Medical Association of Georgia give to the Educational Fund of the AMA $10,000, to be equally divided between our two medical schools. We get credit for it through the AMA, but it actually will go to our local schools.

Also, we propose to ask each member of the Medical Association of Georgia, who sees fit and who is willing, to donate the sum of $10. There is a check in the mail to us now from one of our members for that purpose. Those of you who receive the bulletin from the AMA Educational Fund will see that several Georgia doctors last year donated to that Fund. It is strictly a matter for the House of Delegates. It will come back to you after the House of Delegates handles it.

DR. HOLTON: Dr. Reavis, a good many doctors have asked me something about it. One thing they want to know, and I imagine the delegates also will want to know this afternoon, is what the financial situation is of the two schools in

Georgia. Do you know? Is there any way we can get that information?

PRESIDENT REAVIS: It is my understanding, and I have nothing specific to tell you, that they both need financial aid. The whole intent of it goes back to the fact that the matter of medical education is getting so expensive to the individual, to give to the student, that unless they put it on a practically prohibitive tuition basis to the students they are going to have to have some outside financial aid.

I think that is the whole intent—to make a settlement to the schools that will enable them to go on without charging these terrific fees.

Dr. Bunce is more familiar with this than anyone else. I would like him to clarify the situation.

DR. ALLEN H. BUNCE: Mr. Chairman and gentlemen, I might say that I am here at the request of Dr. Reavis.

As you know, the doctors individually, and the medical associations all over the United States, have been raising voluntary funds for medical education for the past several years. Our two schools in Georgia already received in cash $28,000 from funds contributed by other doctors voluntarily in the United States and their associations. We have already received that amount.

We have contributed less than $500. They gave us that $28,000 because our two schools were among the most needy. They were the poorest schools and needed it worse than any other schools in the United States.

Pennsylvania doctors got together and contributed $4 for every $1 they received for the schools in Pennsylvania. Of course, Pennsylvania is a wealthy state,and they said they were glad we got some of the money down here. It was thought that the doctors of Georgia and the Medical Association of Georgia should certainly try to do something for medical education, since we have already received from other doctors the sum of $28,000 in cash. They expect to help us even more.

When we give this (if we do), we may earmark it, which I believe their letter suggested, for the two schools in Georgia, and the details will be handled by the Council. I think the letter also stated that they would send a letter to every member of the Association, asking them to give something voluntarily, hoping to make this up to $30,000 if possible.

Dr. Kelly, of Augusta, and Dr. Hugh Wood, of Emory, have talked to some of us about it. They got this money from the National Fund because they showed the need for it. They actually needed the money very badly. They hate to beg for money all the time when we ourselves haven't given anything. We in the State of Georgia have not given $500 all together.

South Carolina, with 1,000 members, gave $10,000 cash to their one medical school. In addition to that, every member of the South Carolina State Association has been requested to make a contribution to the fund for their school, and they tell me they have had a very good response.

That has been done throughout the United States, and I am sure Dr. Reavis and Dr. Holton, when they sent this letter, knew what was being done in other states. I, for one, feel that we certainly should support our officers 100 per cent, because they know what the need of our schools is, and our schools would not have gone to the National Fund begging for money.

DR. HOLTON: That is the very thing I wanted the House to know about.

DR. BUNCE: They said, "We ought to help out those poor fellows down in Georgia."

I think Pennsylvania has given over $200,000 to this Fund, and all except one-fourth of it has been spent outside of their state. We got money from Pennsylvania and other states.

I sincerely hope that we will support our officers 100 per cent. Dr. Holton, I hope we can get a contribution of some kind from every member of the Medical Association of Georgia during your term of administration.

DR. HOLTON: I hope so too, Allen, but I thought the members ought to be informed as to what the money will be used for, and the financial situation of the schools.

DR. BUNCE: By the way, Dr. Chaney is going to present this letter as a resolution to the House of Delegates. He thought the letter stated the question completely, and instead of writing the resolution he is going to present the letter as a resolution. That is what he told me a little while ago.

PRESIDENT REAVIS: Thank you, Dr. Bunce. I think that familiarizes the Council with the situation. I believe we can go on to other business, because the matter has to go to the House of Delegates anyway.

DR. WALL: In other words, the $10,000 we are talking about is simply a kick-off, hoping we will get $100,000 from individual doctors over the State to add to the fund?

SECRETARY POER: $100 per doctor per year is what they would like to have.

CHAIRMAN ELLIOTT: Dr. Chambers, you came in late. We have already discussed the budget. Have you anything you want to say?

DR. CHAMBERS: No. I don't know whether you noticed it or not, but when the budget Appropriations Committee met we didn't notice Section 13, Chapter IV, in regard to the appropriations for the Committee on Arrangements. I think that is the same item that is set up in the budget for the annual meeting.

The Constitution and Bylaws state that the Council shall appoint, and that "all expenditures made by that Committee in connection with the Annual Session must be authorized in advance by the Committee on Auditing and Appropriations."

Probably that technically ought to be changed to the Committee on Arrangements instead of the Committee on Annual Meeting. That is a technicality that I ran across the other day. I have read it ten times and that was the first time I ever noticed it.

DR. PRUITT: Do you move that change?

DR. CHAMBERS: I would like to so move.

DR. PRUITT: I second the motion. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: We would like to go back to the minutes now, Mr. Chairman.

CHAIRMAN ELLIOTT: May we have approval of the minutes, gentlemen?

DR. HOLTON: You have to bring up the workmen's compensation fee schedule at this meeting and have it approved. It was submitted to Council some time ago.

SECRETARY POER: I haven't seen it. I can check on it.

CHAIRMAN ELLIOTT: I haven't seen it, either.

DR. HOLTON: They told me they had submitted it, and the Insurance Committee had approved it.

CHAIRMAN ELLIOTT: We will read the minutes of the last meeting.

DR. PRUITT: Let's wait until Holton comes back before we read the minutes.

DR. WALL: Gentlemen, while we have a moment, I would like to introduce Dr. George Dillinger, Councilor-elect from our District, succeeding me. I brought him to sit in and hear what goes on.

PRESIDENT REAVIS: I have two words to say, gentlemen. I wish to take this opportunity to thank each and every one of you. I have made this statement time and time again, that during this year we have had as good and harmonious working relationships between the officers and the Association that I have known has existed since I have been closely associated with the Association. I have been in the House of Delegates and I have been a Councilor for a long time, and I know what has been done in the past.

I want to commend this Council for its active interest in the welfare of the Medical Association of Georgia this year. I want to urge you to do the same next year, and assist Dr. Holton as ably as you have assisted me during the past year.

Several years ago we hade one or two meetings a year, and they were very perfunctory. The Council was a Council in name only. In recent years the Council has become active, particularly in the past year.

Under the new Constitution and Bylaws you have authority that you haven't had in the past. I certainly want to commend you for your excellent work during the past year. Thank you for your help to me as President.

CHAIRMAN ELLIOTT: Thank you, Dr. Reavis.

SECRETARY POER: Dr. Elliott raises a question as to whether each Councilor reports on the conditions in his district. Does he do it this time, or at the House of Delegates?

CHAIRMAN ELLIOTT: He does it at the meeting of

the Council. It is usually done at the first meeting.

PRESIDENT REAVIS: Gentlemen, the meeting today is a called meeting of Council. It was called primarily for the adoption of the budget. Any other matter to come up is all right, but this meeting was called especially to adopt the budget. We have had this thing up so many times!

In the revision of the Constitution and Bylaws, which will be changed, this meeting won't be necessary next year, I hope, because it is a little burden on people to have to attend too many meetings.

DR. HOLTON: These are the minutes that Dr. Dorough had. These are the minutes of his committee meeting.

PRESIDENT REAVIS: That goes to the House of Delegates.

DR. HOLTON: The Council has to approve the fee schedule.

SECRETARY POER: Do you want us to read it?

DR. HOLTON: If this is the proper place to take it up, yes. We have to approve the fee schedule recommended by the Committee on Economics and Insurance. The Council has to approve that before it can be made official.

PRESIDENT REAVIS: I don't think they want to approve it unless they see the revision.

DR. HOLTON: I can get some copies of the fee schedule and have it at the next meeting of Council.

PRESIDENT REAVIS: Let that come up on Wednesday, at the first meeting of Council.

DR. HOLTON: All right.

PRESIDENT REAVIS: This is just a called meeting of Council, to adopt the budget. That is really what we are meeting here for today, and nothing else. This other matter can come up at the regular time.

DR. WALL: According to that, then, we are through with the meeting today.

SECRETARY POER: I would like to acquaint the Council with some things that are going on.

These are the minutes of the Council meeting held on April 9. These have all been published, so I presume everyone has read them. *Secretary Poer read the minutes of the Council meeting on April 9, 1952.*

SECRETARY POER (continuing): I move the adoption of the minutes.

PRESIDENT REAVIS: Second the motion. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: I can more or less acquaint you with certain facts at the present time; they are not exactly on the agenda. One is in regard to the position of Executive Secretary. Some of us on the Executive Committee have had occasion to discuss certain things that may be necessary, and I presume no action by this Council is required.

The new Council may choose to put the matter in the hands of the Executive Committee, because some of us, either in or near Atlanta, will have to be empowered to handle the situation when a decision has to be made.

In regard to the Hardman Award, as some of you may know, the Cup was filled with names several years ago, and the recipients of this Cup in the past three meetings do not have their names appearing on it. I took the matter up with some one who is supposed to know about such things. Actually, it is a rather inexpensive way to perpetuate one's name—to go down and buy a $50 cup and just have it given perpetually.

It was the opinion of most people that such a cup, once it is filled with names, automatically ceases to be an award. However, I took the matter up on my initiative with Mr. Hardman, Jr.

He wishes to come to Atlanta and have a conference with us, perhaps while we are in session here, with the idea that he will continue the Award, and also with the additional idea that we would like to have an endowment to go with it, because many such awards are accompanied by at least a small amount of money. I hope that before the meeting is over we can report progress.

In the meantime, the Awards Committee has made a recommendation for the Hardman Award this year, which will be made at the time of our noon session on Monday.

The handling of the donation to the Woman's Auxiliary came up for some consideration. We donated a sum of $600 at our first business meeting of Council, and it was more or less interpreted that that would be used to put out their bulletin. However, to make a long story very short, they have used less than $300 for that purpose.

I have chosen to interpret that (with your approval) to mean that the remainder of the $600 would be turned over to the President of the Woman's Auxiliary to help pay for some of her extensive expenses that are required of the representative, and which will be in the amount of approximately $200. Mrs. Mays is the outgoing President of the Auxiliary. She has attended the national meetings for the past two years at her own expense.

Personally, I don't think we should ask a person to do so much work for our Association without expressing our appreciation of her help in at least a small way. Therefore, unless I am ruled out of order, I will go ahead and complete the donation of the $600, as was authorized by Council at the first of the year.

We donated $1,000 to the Better Health Council. We don't maintain too close a liaison personally with that group. I am familiar in a general way with what they are doing. Mrs. Shelly Davis will report at the session of the House of Delegates this evening on how that money has been spent.

We have already taken up the matter of meeting in Savannah next year, and will talk to Dr. Holton and the other members concerning the selection of a date. I believe it is their desire to have the meeting a little earlier in the spring on account of the weather, before it gets too warm.

We went over the facilities at the DeSoto Hotel very thoroughly to see how we can fit things together, and they have agreed to take the furniture out of the big lounge so that the scientific and commercial exhibits may have more space. Also, we will use the Savannah and the General Oglethorpe Hotels for extra space.

That brings up the question of meeting in Macon the following year. The hotel facilities in Macon never have been too good. I think we ought to think in terms of the future in this business, because there are so many of those points that someone should make a decision about.

Those are some of the things I wanted to acquaint the Council with, Dr. Elliott.

CHAIRMAN ELLIOTT: Does anyone else have anything to bring up?

DR. PRUITT: I think Council ought to direct how the money for the Woman's Auxiliary is to be handled.

DR. CHAMBERS: I thought the President might be loathe to just take the money without some official motion.

DR. SCHAEFER: If you want to give the President of the Woman's Auxiliary $200 for expenses, they might not have $200 left over from last year.

DR. CHAMBERS: Mr. President, I would like to make a motion that $200 of the residual funds appropriated originally for the Woman's Auxiliary—

DR. PRUITT: The balance up to $600.

DR. CHAMBERS: —the balance, whatever it is, be paid

From India to Atlanta

All the way from India to Atlanta to learn advanced American medical techniques, comes 26-year-old woman Doctor Chitra Mukherjee. Dr. Mukherjee, who was graduated from the Patna Medical College, Indian state of Bilhar, is serving as resident physician at Egleston Hospital for Children, Atlanta. She will spend a year at Egleston under an exchange student program sponsored by the Indian Medical Association. After her year in Atlanta, Dr. Mukherjee will return to India for the practice of pediatrics.

Can You Remember?

Does your memory or office contain any facts or anecdotes about DeKalb county physicians of the 19th and early 20th centuries? If you have any data, you may be able to contribute to an important research project undertaken by Dr. J. Calvin Weaver. Dr. Weaver is preparing a paper on doctors who served DeKalb county in its early days. This paper will be read before the Historical Society of DeKalb County. At the present time Dr. Weaver lacks detailed information on some 44 doctors. He will welcome any information the doctors of Georgia can supply. Dr. Weaver may be addressed at 78 Ellis St., N. E., Atlanta.

to the President of the Woman's Auxiliary this year in payment of her traveling expenses in connection with her work.

DR. PRUITT: Second the motion. *The motion was put to a vote and was carried unanimously.*

DR. WALL: I would like to delegate Dr. Dillinger, incoming Councilor from the 2nd District, to take my seat at this moment.

PRESIDENT REAVIS: He can participate in the discussions, but I don't think he has a legal right to vote.

SECRETARY POER: Dr. Murphy represented him before, by appointment of the President.

PRESIDENT REAVIS: We'll take care of Dr. Dillinger. I move to adjourn. *The motion was duly seconded, was put to a vote, and was carried unanimously, and the meeting adjourned at 12 o'clock noon.*

May 14, 1952

The second meeting of the Council convened at 7:30 a.m., President Reavis presiding.

PRESIDENT REAVIS: Gentlemen, in the absence of our Chairman I will open the meeting. I will ask Dr. Pruitt to report on the 5th District.

DR. PRUITT: The Council has asked that some of the counties having only one, two or three members (not enough to have a good society) see if they could consolidate with other counties.

Rockdale County has one member, so Dr. Turner, our Vice Councilor, and I went down to see Dr. Bridge, who is the only member there. We went to his home at Conyers, Georgia and, after discussing it with him, it was learned that the 4th District in Henry County had about five members, and in Newton County there were some eight members, and at a recent meeting of these three counties they suggested among themselves that they consolidate and make a tri-county medical society.

We recommend that Rockdale County be transferred to the 4th District, and that we support the organization of the tri-county, including Newton, Rockdale and Henry, to be included in the 4th District. This involves the 4th District, so the 4th District could answer whether that would be satisfactory.

DR. PALMER: That is what we want to have done, if we have authorization. Everybody has agreed to it unofficially.

DR. PRUITT: The Councilor from the 5th District recommends that this transfer be made. If you agree to it, then I move that this be done.

DR. PALMER: I second the motion. *The motion was put to a vote and was carried unanimously. Dr. W. G. Elliott, Chairman, resumed the Chair.*

DR. CHAMBERS: Dr. Palmer and I will pursue that, and at the earliest possible time we will arrange for the setting up of this tri-county society.

DR. PRUITT: That means withdrawal of the charter from Rockdale and the other two, and the issuing of a new charter to the tri-county.

DR. HOLTON: Are we open for business now, gentlemen? May I have the floor?

Gentlemen, you have before you a copy of the new schedule for industrial fees, worked out by a committee from the industry board of Georgia. For the first time since we have been fighting for this fee schedule—for the last 15 years—we have been able to get the industry board to give it official recognition, as you will see on about the third page in the folder, which is signed by the industrial board, all the members thereof. This schedule has been examined by the Insurance and Economics Committee, who approved it, and of course it has the approval of the Committee of the Industrial Surgeons' Association. It is a very carefully worked out fee schedule, and all that is necessary now is to make it official by having the Council adopt it.

I move that the Council give its approval to this fee schedule.

NOTE: Industrial Fee Schedule for Workman's Compensation cases was published in the May issue of *The Journal of the Medical Association of Georgia.*

PRESIDENT REAVIS: I second the motion.

DR. HOLTON: This represents the culmination of about fifteen years' work on the part of a good many of us who are interested in industrial surgery.

It is simply a revision of the schedule which now exists, and which we have been using all these years. *The motion was put to a vote and was carried unanimously.*

PRESIDENT REAVIS: As most of you know, since our membership in the AMA was based upon those paying AMA dues, we fell below the mark for three delegates. We are now certain we can certify only two men. We have three duly elected men.

At the time they were elected we were correct in their election, no question about it. The terms of Dr. Minchew and Dr. Allen expire this year, and Dr. Richardson's term expires in 1953.

Dr. Minchew, as you know, has not been very well, and I believe it is true that he is not planning to go to Denver or to Chicago at the present time. He is improving and is able to work now, but he has been advised that it would not be a wise thing for him to make the trip. I talked to Dr. Minchew last Thursday night, at which time he was perfectly willing to clear up the matter by resigning, to save any confusion in our delegation.

He said that since he had a duly elected alternate, he would have to confer with him and give him the privilege of knowing when he could not make it. Friday morning I left home and Dr. Minchew wrote me this letter:

"My dear Reavis: I got in touch with Dr. Dancy about 11 o'clock last night, and he said that he and Mrs. Dancy were leaving this morning for Atlanta. His coming into the picture alters the situation with regard to the attendance at the meeting if the AMA in Chicago in June, providing he will attend as an alternate.

"He plans to be in Mississippi around the 7th and 8th of June. It will not be a big trip to go to Chicago for the first day's session on June 9. However, if he says he cannot go, the thing to do would be to designate Dr. Richardson and legally elect him and Dr. Allen to full-fledged delegates beginning the new period next year." He got mixed up on which one to elect, you see.

"This will obviate the need for me to resign, and if I can do so I might attend the meeting in Denver in December. I think this will clear up and at the same time permit me to serve out the period intended by the members of the Association when I was elected. You may make it clear that I do not want my name placed for another term."

In my opinion, the Council will have to decide this morning; or, if they prefer to think it over, I think they could pass this until the afternoon session today. This is entirely new to some of you. I have tried to talk to everybody so you would all know about it. I talked to one ex-President of the

Association who has been a delegate to the AMA a number of times, and he thinks the fact that Dr. Minchew would not be able to go to the June meeting would allow us to certify Dr. Richardson and Dr. Allen.

I talked to another person who said he didn't see any other way out of it unless we wanted to certify the three on a two-thirds basis. I told him I didn't think the AMA would accept that. He said legally they would have to.

It is in your lap, gentlemen. What do you want to do about it? I think discussion would be in order rather than a motion for the time being; or, if you prefer to think about it and pass this—

PRESIDENT REAVIS: Our understanding is that neither one can go until he is certified. All of them have been duly elected.

DR. ALLEN: They are certified already. I don't see how that brings up any complication or calls for any special controversy.

PRESIDENT REAVIS: The only controversy that exists is that we have the three men duly elected. We have to be in a position to instruct our Secretary what to do.

DR. ALLEN: Do we recommend it to the House of Delegates?

SECRETARY POER: The President and Secretary certify them. Mr. Chairman, I think they were duly elected. I don't see how we can do anything other than certify the three men who were elected, and then it will be up to the AMA Credentials Committee to select the two men they want to seat.

I discussed this with Dr. Cline when he was here, and he said they will seat only two.

DR. HOLTON: I think it would be very poor policy to ask the AMA to select the two.

SECRETARY POER: The AMA term begins next January. If there is no delegate for whom he is an alternate, I don't see how he could be considered an alternate.

DR. ALLEN: I think definitely Dr. Minchew is too ill to go, or has been too ill, and if there is any action on our part my motion still stands—

CHAIRMAN ELLIOTT: What is your motion?

DR. ALLEN: That Dr. Richardson be certified as the second delegate. Dr. Allen has already served in the House.

PRESIDENT REAVIS: They have both been there.

SECRETARY POER: There is no controversy concerning Dr. Richardson.

DR. ALLEN: The motion is that Dr. Allen and Dr. Richardson be certified as the two delegates.

SECRETARY POER: I second that motion. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: Dr. Holton, will you inform Dr. Minchew?

PRESIDENT REAVIS: It has to come from the Secretary's office. It was too big a point for any one man to decide on.

CHAIRMAN ELLIOTT: What is the next thing to come up, Mr. President?

SECRETARY POER: Dr. Elliott, we haven't heard the reports from each Councilor district. You might call for these reports. We can talk informally now, and submit something in writing later, if they wish to.

1st District. Dr. Holton is the only representative here this morning.

DR. HOLTON: I have no report. Neither one of our Councilmen is here.

DR. PRUITT: Do you have a list of the number of members in each county?

SECRETARY POER: We will have it prepared for publication in the proceedings.

DR. PRUITT: Now is the time to know how the districts stand—what you had last year and what you have now.

SECRETARY POER: You can't just produce that out of a hat.

DR. PRUITT: No, but we have it every year; it is routine.

SECRETARY POER: It's not routine for me.

DR. PALMER: There are three doctors in Rockdale County. One belongs to the Fulton County Medical Society. One man is the Rockdale County Medical Society, and the third man never comes to town. Dr. Ware lives on a little farm.

DR. PRUITT: Don't you think the formation of that tri-county society will be the best we can do to take care of the 4th and 5th Districts?

DR. PALMER: Yes, I certainly do.

DR. PRUITT: I include that in my report for the 5th District.

SECRETARY POER: Dr. Dillinger, do you want to say something about the 2nd District?

DR. DILLINGER: I am not well enough acquainted with it.

SECRETARY POER: If you will bear in mind that we do have an annual report to be made it will make things easier. Dr. Elliott, how about the 3rd District?

CHAIRMAN ELLIOTT: Conditions in the 3rd District are about as usual. I don't think they have changed any. I understand there are several new members in the Muscogee County Society.

The general condition of the District is all right. They have had two District meetings during the year. The June meeting was well attended. The fall meeting in November was very poorly attended. There are so many meetings in the fall that the members don't get around to attend the District meetings in the fall.

SECRETARY POER: Do you have any counties with one, two or three members?

CHAIRMAN ELLIOTT: Some of the men in Peach County belong to the Bibb County Medical Society; they are out of the District. I think in Hobson County there are only one or two who form a society, and the rest of them belong to Bibb County. Peach County has about the same situation. I don't know how many belong to the Peach County Society ,but some do.

SECRETARY POER: Anything more about the 5th District?

DR. PRUITT: No, but I want to recommend now that next year the Secretary's office bring in a report from the districts, giving what they had last year and what they have this year, so we can make a comparison. Some of the men in the districts don't know how many new members have been added.

I think it is very valuable to show how we stood last year and how we stand this year. It helps one to sort of expose a man's district, if you want to put it that way, as well as somebody else's, so we can all see what is going on.

SECRETARY POER: I will be glad to accept that suggestion.

DR. PRUITT: We have always done that. This is a poor way to make a report, without having something before us.

SECRETARY POER: It was my impression that each Councilor got certain information for himself.

DR. PRUITT: The Secretary's office has the only information.

SECRETARY POER: That is available to any Councilor who wants it.

DR. PRUITT: We want it for this meeting.

SECRETARY POER: You can get it from the office when it is open.

CHAIRMAN ELLIOTT: How about the 4th District?

DR. CHAMBERS: The 4th District continues to have four meetings that are usually well attended. The meetings are on a rotation basis between LaGrange, Newnan, Thomasto nand Griffin. There is interest in the 4th District. We have had the loss of a few members, and a few men have moved in. I can't give you the exact status without referring to the records.

We have had one controversial issue in the District this past year, which was a matter of personality clash, that was settled at the local level where it began. It may be that it will have to be brought before the Council, but I hope not. I would rather not make any direct report as to the nature of the matter unless we can't settle it at the source.

CHAIRMAN ELLIOTT: Dr. Pruitt, will you report for the 5th District?

DR. PRUITT: I have reported. I can't tell you how many members we have, or whether we have gained or lost. I don't know.

SECRETARY POER: I believe all the Councilors received a letter asking for an annual report.

DR. ALLEN: Concerning the 6th District, we have had

AMEF Offers New Aid

The sum of $671,834 was given by the AMEF to the National Fund for Medical Education for distribution to the 79 medical schools in the United States. This represents the amount collected from physicians during the first six months of 1952. Georgia doctors wishing to augment this fund, please make your contribution payable to the AMEF and forward your check to the MAG headquarters office in Atlanta.

our regular District meetings. We had a winter meeting in Macon that was well attended. We had a meeting in one of the outlying towns during the summer.

As far as I know, our membership has been holding up all right. It may not have been entirely in order, but in anticipating the new Constitution I had our local county pass a resolutiin that we would invite any of the doctors in our neighboring counties to come in through Baldwin County. They are already doing that in Laurens and Bibb Counties, and have been doing it for years. We have on one occasion invited them when they had only two doctors in a county.

There has been no special problem. We all get along pretty well together.

DR. WOOD: The 7th District had two regular meetings, in September and April, which were quite well attended. I don't know of anything unusual in the District. We are getting along very well.

CHAIRMAN ELLIOTT: How about the 8th District?

DR. HARPER: We have somewhere around 130 members, with about 122 last year. There has been a little increase. I think we lost one or two men from the District when they went into the Army.

We had a poorly attended fall meeting. We are going to try to hold another one this fall. It may be that if it doesn't pick up we will have to start to rotate again. We thought having a mixed meeting might be more social than scientific. We will try it one more time before we change the type of meeting.

At the spring meeting in Douglas, or just before it, we had a good program of entirely local talent except for Dr. Holton, who met with us, who practically was local talent anyway. I think we had a very good meeting in April.

We have had one or two little personality difficulties that should be handled within the local county society.

DR. SCHAEFER: The 9th District is doing very well. We lost two doctors this year by death. We lost one who moved out of the State.

We had a well attended meeting in the spring, and also a fall meeting that was well attended. The next meeting will be our fall meeting, in Commerce. We have had a lot of new hospitals up there; the new one at Clayton has been opened, another one at Gainesville.

I might report on one controversial thing that came up in the 9th District that was brought before the Council. Dr. Wood, Dr. Pruitt and I made a trip to that section, and found that everything had been amicably settled by the man's creditors, who apparently ran him out of Georgia. Everything worked out very nicely, and it has all been settled.

DR. TURNER: Everything but the debt was settled?

DR. SCHAEFER: That's right. One thing I would like to mention is that yesterday, at the 50 year presentation, Dr. Jackson's name was mentioned. Dr. Jackson has been dead for about four years. Don't mail his.

PRESIDENT REAVIS: I think there is another deceased doctor's name in that list.

DR. ROULE: Concerning the 10th District, we have had two meetings. Our Augusta meeting was not too well attended. The meeting in Athens was excellent. I am not sure, but I think Dr. Cheeves said there had been an increase in numbers, largely due to new men who have come to Richmond County.

As far as the small counties are concerned, we have been working on McDuffy County, and I think at the moment there is only one member there.

SECRETARY POER: I was just asking Dr. Reavis what happens when a Councilor does not function. Dr. Howard has participated but very little in the deliberations of the Council in the past year. Dr. Brown was present once.

PRESIDENT REAVIS: I think he did better last year than he has ever done.

DR. HOLTON: I am going to build a fire under him, and if he doesn't want to do it I will ask him to resign. If he does resign, does the district have to elect someone else?

SECRETARY POER: They have to nominate someone, but you can fill the position until they have that chance to designate someone.

DR. HOLTON: Could his alternate take over?

SECRETARY POER: The Vice Councilor would automatically take over.

CHAIRMAN ELLIOTT: Up until this year Dr. Brown has always attended the meetings when Dr. Howard didn't. He didn't this year.

SECRETARY POER: He came to one meeting this year, and Dr. Howard came to one.

CHAIRMAN ELLIOTT: Is there anything else to take up this morning?

PRESIDENT REAVIS: As far as I know, that completes the official business of the Council.

CHAIRMAN ELLIGTT: Do we do anything about the finances until the meeting after the House of Delegates meets?

PRESIDENT REAVIS: That's right; you have a reorganization meeting immediately after the business session today, ta which time the newly elected officers will take over.

If the revision to the Constitution and Bylaws goes through today, your President next time will be automatically Chairman of the Council, and you will not have to elect a Chairman—but you do have to elect two men on the Executive Committee.

I think all of you know that all members of Council are members of the House of Delegates.

DR. ALLEN: Without a vote?

PRESIDENT REAVIS: With a vote. You are automatically members of the House.

DR. PRUITT: Does that include the Vice Councilors?

PRESIDENT REAVIS: No, sir; just the Councilors. If a man is acting Councilor, that's different.

DR. PRUITT: Isn't he a member of the House of Delegates?

PRESIDENT REAVIS: No. There is only one vote from each district.

DR. PRUITT: I know, but the district nominates delegates, or the county society nominates delegates. The Councilor and Vice Councilor have to have some place in there, otherwise you have two men—suppose the Councilor is represented. The Vice Councilor attends but has no vote in the House. If he is there, only one of them can vote, so the Vice Councilor automatically ought to be represented in the House, just the same as the Councilor.

SECRETARY POER: That would have to be added.

DR. TURNAER: I am sure Dr. Reavis is right. The Vice Councilor has no vote. I am attending here as a Vice Councilor. A Vice Councilor is invited to attend and observe but has no vote. I am in the House of Delegates by virtue of being on the Board of Trustees, you see.

DR. PRUITT: Of the county society, yes; but the Vice Councilor also—

PRESIDENT REAVIS: He would not have a vote, however, if the Councilor was there.

DR. PRUITT: I think that because we have been giving a little more importance to the Vice Councilor, he ought to have a vote in the House of Delegates.

DR. PALMER: The Vice Councilor is obligated to be there.

PRESIDENT REAVIS: It is my personal opinion that it is a mistake to put the Councilor in the House of Delegates, for this reason—

DR. PRUITT: Do you mean the Vice Councilor?

PRESIDENT REAVIS: Any of them. They ought to be separate. It's just like having two bosses. This would be a little overlapping on certain questions that might involve a matter of finances, for instance, and you have no control over either one of them. That is not in the Constitution and Bylaws.

DR. TURNER: At the same time I think it is very wrong. I think the Council should be very close to what is taking place in the House of Delegates, and I don't think they can be close to it unless they are sitting in the House.

DR. SCHAEFER: Dr. Herman Turner called me yesterday about the Georgia Society for Crippled Children. They have a Society here in Georgia, and they are working on the Crippled Children's program. They have no medical men on that program at all, and they have about $90,000 so far to spend this year on the rehabilitation of crippled children.

He asked me to bring before Council the matter of asking Council to recommend to them approximately five medical men for a medical advisory board to work with them. What they are interested in primarily, according to what he said, would be pediatricians and orthopedic doctors. They suggested one from Atlanta, Macon, Columbus, Savannah and one from one small town. They would like to carry that body permanently over a period of years.

PRESIDENT REAVIS: Make the motion.

DR. SCHAEFER: I make a motion that the incoming President be authorized to name those men.

PRESIDENT REAVIS: I second that motion.

DR. TURNER: The President would not have to have that authority, would he? He already has it. It would be established as a permanent committee according to the Bylaws; right?

DR. SCHAEFER: Not necessarily.

CHAIRMAN ELLIOTT: We just recommend that these men be on the advisory board. We won't have to tell them the men have to serve on the job. All we can do is to recommend.

DR. SCHAEFER: They would like the Association to recommend names to them so that when this money is spent it will be spent with medical advice.

CHAIRMAN ELLIOTT: Your motion is that Council ask the incoming President to appoint this board from the towns they recommend? To recommend a committee composed of five doctors?

DR. SCHAEFER: Why not put it to the Executive Committee of Council, and let them handle it? They suggested three names of men with whom they had worked. There is on obligation to name these men, but they said Dr. Jernigan, from Atlanta, Dr. Jordan from Macon, and Dr. Cook of Columbus had been working somewhat with them.

DR. HOLTON: What organization is this?

DR. SCHAEFER: The Georgia Society for Crippled Children. They would rather have pediatricians and orthopedic men, because it seems those are their problems.

CHAIRMAN ELLIOTT: Your motion is that the Executive Board of Council recommend this committee?

DR. SCHAEFER: That's right.

PRESIDENT REAVIS: I second that. *The motion was put to a vote and was carried.*

The meeting *adjourned sine die* at 8:15 a. m.

May 14, 1952

The first session of the new Council convened at 12:30 p. m., Secretary Poer presiding.

The following Councilors were present:

1st District—No delegate or alternate
2nd District—George Dillinger
3rd District—W. G. Elliott
4th Distrcit—J. W. Chambers
5th District—Marion C. Pruitt
6th District—H. D. Allen, Jr.
7th District—D. Lloyd Wood
8th District—Sage Harper
9th District—W. Bruce Schaefer
10th District—H. L. Cheeves

President Holton

Secretary-Treasurer Poer.

SECRETARY POER: We are at a loss concerning the question of whether the changes in the Constitution and Bylaws state that the President shall be Chairman of the Council.

The budget was sent to all members of the old Council. Do you think it should also be approved by this new Council?

DR. WOOD: It should be approved by the new Council; then there will be no question about it. You will have to organize first.

PRESIDENT HOLTON: The President will entertain a motion or nominations for Chairman of Council.

DR. SCHAEFER: I nominate Dr. H. D. Allen.

PRESIDENT HOLTON: Are there any other nominations?

DR. CHAMBER: I move nominations be closed and that Dr. Allen be elected.

DR. HARPER: Second the motion. *The motion was put to a vote and was carried unanimously. Dr. Allen assumed the Chair.*

SECRETARY POER: Next is the election of a Vice Chairman.

DR. ELLIOTT: I nominate Dr. Sage Harper, and move that he be so elected.

DR. WOOD: Second. *The motion was put to a vote and was carried unanimously.*

CHAIRMAN ALLEN: What business is there to come before the Council? Do you wish to elect a clerk?

DR. WOOD: I nominate Dr. Poer and move his election.

PRESIDENT HOLTON: Second the motion. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: The next order of business is to select a date for the first meeting of Council. It has been customary to meet on a Sunday. Naturally, I am here any

Democratic Party Plank

We will continue to work for better health for every American, especially our children. We pledge continued and wholehearted support for the campaign that modern medicine is waging against mental illness, cancer, heart disease and other diseases.

Research: We favor continued and vigorous support, from private and public sources, of research into the causes, prevention and cure of disease.

Medical Education: We advocate federal aid for medical education to help overcome the growing shortages of doctors, nurses, and other trained health personnel.

Hospitals and Health Centers: We pledge continued support for federal aid to hospital construction. We pledge increased federal aid to promote public health through preventive programs and health services, especially in rural areas.

Cost of Medical Care: We also advocate a resolute attack on the heavy financial hazard of serious illness. We recognize that the costs of modern medical care have grown to be prohibitive for many millions of people. We commend President Truman for establishing the non-partisan commission on the health needs of the nation to seek an acceptable solution of this urgent problem.

day of the week that suits you. We should meet as soon as convenient. There are certain authorizations for which we have to have the official transcript before we can proceed. June 22 would be my suggestion.

CHAIRMAN ALLEN: Does that suit everyone? Do I hear a motion?

DR. SCHAEFER: I move we meet on June 22.

DR. ELLIOTT: Second the motion.

SECRETARY POER: May we have a suggestion as to the time of day that is most convenient? Ordinarily we meet at 11 o'clock and end with a lunch, giving you the afternoon free. If 11 o'clock is all right, we will set it for then.

We will meet at 11 o'clock on Sunday, June 22.

The next item of business is approval of the current operations of the Secretary-Treasurer's office until we can have a regular business meeting. Designation of two members of this group should be made for members of the Executive Committee. In the past Dr. Wood and the Chairman have served.

DR. WOOD: I think the Chairman of the Council is automatically on it, isn't he?

SECRETARY POER: No, not any more. "Council shall set up an Executive Committee composed of the President, the Secretary-Treasurer and two members." Dr. Holton and I are automatically members; the other two men are elected by the Council.

DR. HARPER: They should be some reasonable distance from here.

DR. CHAMBERS: I would like to nominate Dr. Bruce Schaefer as a member of the Executive Committee.

DR. WOOD: I nominate Dr. Allen as the other man.

DR. HARPER: I move nominations be closed and that these two men be elected.

DR. CHAMBERS: Second the motion. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: It might be that the Executive Committee will have to meet before June 22, on account of certain organizational problems that exist in our office. I think everyone is aware of them.

If it is agreeable to you, I would like to have a motion from Council that the Executive Committee be empowered to handle that situation as they see fit. The decision sooner or later is going to have to be made. The Executive Committee will have to have the authority; or, in lieu of that, we will have to call the whole Council together to take care of the personnel situation.

DR. WOOD: I make a motion that the Executive Committee be empowered to act for Council in matters of office staff personnel.

SECRETARY POER: I can tell you on the side that I have some thoughts that I believe will work out all right. Would you all approve, then, the operation of the office, with current salaries and payment of office expenses as has been done in the past, until the Council can hold its regular meeting and go into those matters in detail?

First we will go back and vote on Dr. Wood's motion that the Executive Committee be empowered to handle the question of office personnel as it sees fit, with the power to set such salaries. *The motion was put to a vote and was carried unanimously.*

PRESIDENT HOLTON: I move that Dr. Poer's operational expenses be approved.

DR. ELLIOTT: Second the motion.

SECRETARY POER: We should state specifically in the motion that the salaries are approved as have been carried on in the past. I called the auditor on the phone and he said we should specifically state salaries. It is all right to add current expenses, too, but we did have full authority from the same organizational meeting in Augusta last year.

DR. CHAMBERS: I don't know if it has to be done at this meeting, but the Chairman of the Council has to appoint an Audit and Appropriations Committee. I was Chairman of that last year. I would like to know if we can be relieved.

SECRETARY POER: We have a motion before us that the expenses of the office be taken care of. *The motion was put to a vote and was carried unanimously.*

PRESIDENT HOLTON: To make it legal, I will move that the budget as submitted by the old Council be approved by this new Council.

Credit Points for Reserves

Reserve credit points may be earned by medical service Reserve Officers for attendance at the daily sessions of the 59th Annual Meeting of the Association of Military Surgeons, the Department of Defense has announced. The various sessions of the meeting will be held at the Statler Hotel, Washington, D. C., November 17-19. Point credits will be awarded on the basis of one point for each day of attendance, provided meetings attended total more than two hours.

DR. WOOD: Second. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: Now, the question on the Audit and Appropriations Committee.

DR. CHAMBERS: I thought it might be wise to take it up now.

DR. PRUITT: I move that the old Committee be reappointed. They are acquainted with it, and they did a wonderful job. I know they can do it with more ease than a new committee. I know it's a job, but somebody has to do it.

PRESIDENT HOLTON: I certainly would like to impose upon you fellows and have you take it for another year.

DR. ELLIOTT: I second that motion.

PRESIDENT HOLTON: The Chairman of Council can appoint whomever he pleases on that Committee, can he not?

CHAIRMAN ALLEN: Yes.

DR. PRUITT: I can't say no, because I imposed upon these men. Dr. Schaefer wants to be relieved from the Audit and Appropriations Committee.

SECRETARY POER: That is fair. The Council automatically meets every four months, and the Executive Committee every two months, so we will hold three more full meetings of Council during the year, four months apart.

PRESIDENT HOLTON: Shouldn't the President-elect attend the Executive Committee meetings?

SECRETARY POER: I don't believe you attended them this past year, did you?

PRESIDENT HOLTON: No, I did not.

SECRETARY POER: You live a long way off, and Dr. Harbin is close by. One way to swing him into this work would be to have him attend.

DR. PRUITT: I would like to move that the President-elect be invited to sit in on all Executive Committee meetings.

DR. DILLINGER: I second that motion. *The motion was put to a vote and was carried unanimously.*

SECRETARY POER: I believe that is all we have to accomplish at this moment.

The meeting adjourned *sine die at 1 p. m.*

Report of the Medical Military Affairs Committee
Carter Smith, Chairman

During the past year the local Military Affairs Committees of the various County Medical Societies have been organized. These local committees have functioned so well, it has rarely been necessary for the state Committee to assist them in the many difficult problems that have arisen. The credit for the efficient organization of these committees goes largely to the secretary of your society, Dr. Henry Poer.

The majority of the physicians of Priority I have been called to active duty. The few remaining in this classification will probably have to enter the Armed Forces within the next few months. The communities in which these men reside have been informed of the necessity to procure a replacement for them and about one year has elapsed since this information was disseminated. Many communities have secured additional physicians but some have not and it is

unlikely that the men of Priority I can be deferred much longer. It will soon be necessary to call those physicians in Priority II unless a sufficient number from Priority I can be obtained to replace those who will soon complete their tour of duty in the Armed Forces. It is hoped that the affected communities will soon acquire adequate replacement so that the normal standards of health can be maintained. Assistance for replacement can be obtained from the office of the Secretary of your State Medical Association.

There seems no immediate end to the maintenance of a large Armed Force and it is the duty of the medical profession to supply and adequate number of physicians and at the same time to maintain an adequate number of physicians for the civilian population. To maintain this balance and to see that those physicians in Priority I are in service before those of other priorities have to return to active duty are the main functions of this committee and its local subcommittees for the next year.

Summary of Classifications—Special Registration No. 1

	Priority I	Priority II	Priority III	Priority IV
Total Special Registrants	175	48	389	800
Class 1-A, examined and acceptable	13*	11		
Class 1-A, not examined	4	1	35	
Class 1-C, inducted	1			
Class 1-C, enlisted	67	4		
Class 1-D, Reserve	31	10		
Class 2-A (Deferred)	35	15	3	
Class 4-F (Physically disqualified)	23	7	1	

*7 of these 1-A doctors have been called for induction and were notified to accept commissions.

Report of

MAG COUNCIL

at Atlanta, June 22, 1952

Present: Drs. H. D. Allen, David Henry Poer, C. F. Holton, W. Bruce Schaefer, Sage Harper, George R. Dillinger, H. L. Cheves, D. Lloyd Wood, Clarence B. Palmer, Marion C. Pruitt, William P. Harbin, Jr., J. W. Chambers, W. G. Elliott, Carl S. Pittman, Sr., E. A. Allen, Charles T. Brown and Mr. Sid Wrightsman, Jr.

Dr. H. D. Allen, chairman, presided.

The following action was taken:

1. Approved action by Council Executive Committee on May 25, 1952.

2. Authorized appointment by President Holton of three-member Veterans Administration liaison committee.

3. Indorsed proposal, as submitted by Georgia Optometric Association, for formation of an Interprofessional Council and authorized Association participation thereon.

4. Ordered payment of $1,000 to Better Health Council of Georgia as donation to its 1952-53 program of activities.

5. Approved Auxiliary request for $250 for Auxiliary President and President-Elect's 1952-53 travel allowance and for $600 for Auxiliary publication purposes.

6. Authorized official Association participation in annual Conference of Presidents and Other Medical Society Officers which immediately precedes June Annual Session of American Medical Association.

7. Authorized immediate donation of $10,000 to American Medical Education Foundation as initially ordered by House of Delegates at 1952 Annual Session.

8. Expressed official disapproval of inclusion of Section 3 in H.R. 7800, amendment to Social Security Law, and ordered executive secretary to notify Senators George and Russell about action.

9. Disallowed future billing of Georgia Plan commercial underwriters for legal review of policies by Association legal advisor.

10. Approved proposal to reorganize certain aspects in Association Headquarters Office and hired Mr. Milton Krueger, effective July 1st, on full-time basis as executive officer in charge of the *Journal* and other publications, whose future services would include additional Association activities.

The meeting adjourned at 1:30 p. m.

Report of

MAG EXECUTIVE COUNCIL

at Savannah, August 9, 1952

Present: Drs. H. D. Allen, David Henry Poer, C. F. Holton, Lee Howard, M. J. Epting and Mr. Sid Wrightsman, Jr.

Dr. H. D. Allen, chairman, presided.

The following action was taken:

1. Authorized executive secretary's attendance at the AMA Public Relations Institute, Chicago, September 4-5 and ordered that Mrs. Shelley C. Davis, Atlanta, be reimbursed in amount of $75 for her attendance thereat to participate on the speakers panel at invitation of Mr. Leo Brown, AMA Public Relations Director.

2. Approved proposal advanced by Secretary Poer to have executive secretary visit headquarters offices of neighboring state medical associations for purpose of instruction and ordered executive secretary to carry out proposal at his convenience.

3. Authorized payment of $150 to Miss Viola Berry which represented her entitlement to two-weeks vacation with pay.

4. Ordered payment of full-month's consultant fee to Mr. Randolph Fort as gesture of gratitude by Association.

5. Requested initial meetings of all Association Committees no later than September 30th.

6. Discussed aspects of 1953 Annual Session in Savannah and agreed to delay setting of exhibit booth prices pending receipt of information from DeSoto Hotel officials.

7. Commended Editor Poer for Journal improvements and discussed tentative appointments to Journal Editorial Board.

The meeting adjourned at 2:30 p. m.

Report of Committee on

SCIENTIFIC WORKS

at Savannah August 9, 1952

The meeting was held in the Habersham Room of the DeSoto Hotel, Saturday, August 9, 2:30 p. m. Those present were Chariman Thomas L. Ross, Macon; Charles L. Prince, Savannah; C. F. Holton, Savannah; D. H. Poer, Atlanta, and Sid Wrightsman, Atlanta.

Dr. Monroe J. Epting, Chairman of the Local Committee on Arrangements for the 1953 Session in Savannah met with the Committee and discussed details as they related to his Committee. Plans in general were formulated with the hotel management and with the Georgia Medical Society, who will be the local host. The following decisions were made:

1. The general plan for this meeting will be similar to the 1952 Session held in Atlanta. Council will hold its final Session on Sunday morning, May 10, and the House of Delegates will meet at 2 p. m. probably in the Auditorium of the Georgia Medical Society. Memorial Exercises in conjunction with the Woman's Auxiliary will be held at 4 p. m. At 7 p. m., the members of the Georgia Medical Society and their wives will be hosts to the members of the House of Delegates and their wives at some type of social event.

2. On Monday, Tuesday and Wednesday mornings, the program will be directed to the general practitioner, holding only one general session each day. At noon the Specialty Societies will hold their luncheons and business meetings, and in the afternoon three or more section meetings will be arranged. On Monday evening, the medical alumni reunions will be held, and arrangements will be made for those doctors in Georgia who have not been included in the past. On Tuesday evening, the President's Dinner or Annual Banquet of the Association will be held, probably in the DeSoto Hotel.

3. This year the Golf Tournament will be better organized and play will be permitted on Sunday, Monday and Tuesday. Prizes will be awarded at the time of the President's dinner.

4. In setting up the program for the various sections, preference will be given to those not included in the 1952 program. The specialty groups have been requested to assist in furnishing guest speakers and many have responded promptly. President W. W. Bauer of the AMA has accepted our invitation, and Dr. Cyrus Sturgis, Professor of Medicine, University of Michigan, will give the Abner W. Calhoun lecture. At least ten other guest speakers will appear on the program.

5. Consideration was then given to the papers to be presented and notices will appear in the *Journal*, inviting all members to submit titles before November 10. It was decided that one half of the papers to be given before the morning session would be selected from members of the Association. Practically all of the papers for the afternoon session will be given by MAG members which will provide a total of more than sixty places to be filled from the state.

6. It was decided to hold the next meeting of the Committee in Atlanta at the time of the meeting of Council, which will be the first Sunday in October.

News and Information

ANNOUNCEMENTS

The Forum on Fundamental Surgical Problems, one of the most important features of the 38th Clinical Congress of the American College of Surgeons is to be held in New York City, September 22-26. The Forum will begin Monday and continue through Friday, with 15 sessions in all. More than 10,000 surgeons, physician sand hospital representatives from all over the world are expected to attend this Clinical Congress, largest scientific meeting of surgeons in the world. The Waldorf-Astoria will serve as headquarters.

The Annual Meeting of the Georgia Urological Association and the Georgia Chapter of the American College of Surgeons will be held at the Ralston Hotel, Columbus, on October 28. On the following day (29th), the Georgia State Society of Obstetrics and Gynecology will meet in the same place.

Guest speakers include: Dr. Harold T. Foss, President of the American College of Surgeons; Dr. Edward T. Churchill, professor of surgery at Harvard; Dr. Grant E. Ward, associate professor of surgery (onocolgy) at Johns Hopkins and the University of Maryland; and Dr. Parker E. Smith, former associate professor of surgery (urology) at the University of Cincinnati.

Other guest speakers are scheduled to appear on the program and a full program will be published in the October *Journal*. Everyone is invited to attend the meeting and the joint subscription dinner will be held at the Country Club, Tuesday at 6 p. m. Dr. Hugh Bickerstaff, Dr. F. D. Edwards and Dr. Luther H. Wolff make up the Local Committee on Arrangements.

The Georgia Chapter of the American Academy of General Practice will hold its State Meeting on October 23, at the Idle Hour Club in Macon. Registration will begin at 10 a. m. After lunch, the scientific section of the program starts at 2 p. m. Speakers for this program are: Dr. J. P. Sanders of Shreveport, immediate past President of the American Academy of General Practice; Dr. Andrew S. Tombs, Victoria, Texas; Dr. Eugene Regans, Vanderbilt University Medical School, Nashville; Dr. Paul Williamson, Chief of General Practice, University of Tennessee School of Medicine, Memphis; and Dr. Major Fowler of Atlanta.

The ladies are invited to the lunch and a program will be held for them in the afternoon featuring authoress Mrs. Selma Thompson-Slayden of Thomaston. The meeting is open to both members of the American Academy of General Practice and other doctors and their wives.

The Better Health Council of Georgia announces its Statewide Annual Meeting to be held in the Academy of Medicine, Atlanta, September 25-26.

Dr. F. S. Crockett of the AMA, Chicago, will be the speaker at the general session the morning of the 25th. Later the meeting will adjourn into five separate panel discussion groups on the topics of Adequate Health Personnel, Cost of Hospital and Health Facilities, Provisions for the Chronically Ill, Mental Health Problems and Health Insurance Plans.

The meeting will be led by a representative of the National Health Council at the general session the next morning. Persons interested in any way in any aspect of Georgia health problems are urged to attend this meeting.

Emory University School of Medicine in cooperation with the Medical Association of Georgia and the Georgia Chapter of the American Academy of

General Practice announces the Fifth Annual Postgraduate Course for General Practitioners. It is to be held at Grady Memorial Hospital Auditorium on October 6-10. The course is designed to present current ideas concerning the diagnostic and therapeutic problems of general practice. The registration fee is $10.00. Make application for enrollment to: Director of Postgraduate Education, Emory University School of Medicine, 36 Butler Street, S. E., Atlanta 3, Georgia.

SOCIETIES

Seventh District Medical Society has scheduled their Fall meeting for Wednesday, September 17, at 2 p. m. in the Marietta Country Club. The Cobb County Medical Society is host for the meeting. The program will commence with an address of welcome from Dr. Ralph Fowler, of Marietta. Scientific papers will then be presented by the following members: Dr. T. J. VanSant, Jr., Marietta, "Etiology, Pathogenesis and Medical Management of Bronchiectasis"; Dr. Edward S. Mark, Marietta, "Surgical Treatment of Bronchiectasis"; Dr. M. M. Hagood, Marietta, "Tetanus, A Report of Two Cases—"; and Dr. C. S. Glisson, Atlanta, "Cesarian Section."

The Auxiliary will meet a this time also, and will hold their session in the parlor of the Methodist Church. The next Seventh District meeting is slated for the first Thursday in April, 1953.

Ninth District Medical Society will meet in Commerce, Georgia, on September 17, at 3 p. m. in the Veterans Club Building. Dr. O. C. Pittman, Commerce, will deliver the welcome address. Papers to be presented are as follows: "Modern Management of Premature Infants" by Dr. Martin Smith, Gainesville; "The Management of the Menopausal Patient" by Dr. John Cross, Atlanta; and the third paper will be given by Dr. C. F. Holton, Savannah, President of the Medical Association of Georgia. The Women's Auxiliary will meet at the residence of Dr. and Mrs. Paul Scoggins. Mrs. Joe Arrendale is in charge of the meeting. The Ninth District's next meeting is scheduled for April, 1953.

Tenth District Medical Society held its annual summer meeting August 19 at the Elberton Country Club, Elberton, with the following scientific program: "Postoperative Hemorrhage," Dr. Richard Torpin, and "Recent Advances in the Diagnosis of Cancer in the Female," Dr. H. E. Nieburgs, both of Augusta; "Restoring Conceptive Ability After Sterilization: Report of a Case," Dr. M. C. Adair, Washington, and "Vaginal Discharge," Dr. Bothwell E. Traylor, Athens.

Following the scientific program, members were addressed by Dr. C. F. Holton, President, Savannah, and Mr. Sid Wrightsman, Jr. and Mr. Milton Krueger, executive secretary and publications director, respectively, both of Atlanta.

The following 1952-53 officers were elected: Dr. A. W. Simpson, Jr., President, Washington; Dr. Stewart D. Brown, Jr., Vice-President, Royston, and Dr. Bothwell E. Traylor, Secretary-Treasurer, Athens. The next meeting is scheduled for the second Wednesday in February, 1953.

Ware County Medical Society, at their August meeting, heard Dr. Robert G. Ellison, University Hospital, Augusta, discuss chest injuries. Dr. Ellison's lecture dealt with the various types of injuries of the chest including crushing injuries, penetrating injuries and injuries to the thorax. The Society went on record as approving the American Legion program to relieve poliomyelitis in Waycross through the purchase of an iron lung. Dr. Arthur M. Knight, Jr., Dr. Harold W. Muecke and Dr. W. L. Pomeroy were appointed to a committee to work with the Legion on this project.

DEATHS

GARNER: *Dr. James Ryan Garner,* 75, of Atlanta, died July 16 in a private Atlanta hospital. A native of Lynchburg, Va., Dr. Garner had lived in Atlanta since 1899. He attended Emory College, Oxford and received his M.D. degree from the University of Virginia. He interned at Lying-In Hospital, New York City. He was former chief surgeon of the Atlanta-West Point Railway Co., the Western Railway of Alabama, the Georgia Railroad and the Atlanta Joint Terminals. He served 27 years with

the railroads before his retirement in 1947. Previous to his association with the railroads, Dr. Garner practiced medicine in Atlanta for 18 years. He also taught forensic medicine at the University of Georgia School of Medicine. In 1950 Dr. Garner received a badge from the Medical Association of Georgia in recognition of his 50 years of medical service.

OWENSBY: *Dr. Newdigate Moreland Owensby,* 69, of Atlanta, died after a brief illness August 10. Dr. Owensby was psychiatrist in chief at Brookhaven Manor Sanitarium. He was also a consulting psychiatrist to Grady Memorial Hospital and Georgia Baptist Hospital. Dr. Owensby graduated from the University of Maryland School of Medicine in 1904 and took postgraduate work in London, Edinburgh, Berlin, Munich, Vienna and Paris.

SPRUELL: *Dr. T. M. Spruell,* 84, Carroll County physician, of Temple and Atlanta, died July 25. A native of Coweta County, Georgia, Dr. Spruell graduated from Chattanooga Medical College in 1892 and did postgraduate work at Steiner Clinic in Chicago and Grady Memorial Hospital in Atlanta. He commenced general practice in Temple in 1892 and was active 56 years.

PERSONALS

Dr. Donald S. Bickers, of Atlanta, announces the opening of his offices for the practice of neurological surgery, Medical Arts Building, Atlanta.

Dr. Joseph H. Brannen and *Dr. John P. Hill, Jr.,* announce the opening of offices at 901 N. Davis Street, Albany, for practice limited to urology.

Dr. Charles F. Cooper, Jr., of Atlanta, is now associated with *Dr. Alton V. Hallum* in the practice of ophthalmology in Atlanta.

Dr. Joseph M. Echols, obstetrician and gynecologist, announces his association with *Dr. T. C. Davison* and *Dr. A. H. Letton.*

Dr. Francis W. Fitzhugh, Jr., of Atlanta, announces the opening of his office for the practice of internal medicine at 35 Fourth Street, N. E., Atlanta.

Dr. James Funk, of Atlanta, has associated with *Dr. Lawson Thornton* and *Dr. Philip Warner* in the practice of orthopedic surgery at 478 Peachtree Street, N. E., Atlanta.

Dr. Frank Gibson, of Bainbridge, has moved his office from the Riverside Clinic to the Bainbridge Hospital.

Dr. Harold W. Goldin, who has been on active duty with U. S. Air Force for the past 21 months, will resume his practice in Rockmart.

Dr. Billy Hardman, of Gainesville, has moved his office to a building on East Broad Street, Gainesville, which he will share with *Dr. Barton McCrum.*

Dr. John S. Inman, Jr., of Albany, announces the opening of his offices for the practice of obstetrics and gynecology at 711 N. Monroe Street, Albany.

Dr. Carl C. Jones, Jr. announces the opening of his offices for the practice of allergy and internal medicine at the Medical Arts Building, Atlanta.

Dr. Morgan Kellum, of Thomaston, has just returned from Mayo Clinic where he spent two weeks studying surgery.

Dr. Richard E. King, of Atlanta, has associated with *Dr. Wood W. Lovell* for a practice limited to orthopedic surgery and fractures in the Medical Arts Building, Atlanta.

Dr. Leonard T. Maholick and *Grant W. Husband, M.A.P.S.W.* announce the opening of their offices for the practice of individual and group psychotherapy at 1027 Second Avenue, Columbus.

Dr. H. H. McNeely and *Dr. A. G. Singer,* both of Toccoa, have been appointed to directorships in the Toccoa area civil defense program. Dr. McNeely will serve as director of the Medical Services Branch and Dr. Singer was named director of the Civil Defense Health Service.

Dr. Thomas C. McPherson, of Atlanta, announces the removal of his offices to 104 Ponce de Leon Avenue, N. E., Atlanta, for the practice of pediatrics.

Dr. William F. Wager, a native of Atlanta, will be associated with *Dr. L. W. Willis* and *Dr. Henry A. Bridges* in the practice of general medicine in Bainbridge.

Dr. Charles H. Watts, Jr., will engage in the practice of surgery with his father, *Dr. Charles H. Watts,* in Thomasville.

AUXILIARY

Combining a farewell party with a welcoming one, the members of the Auxiliary to the Lamar County Medical Society and staff members of the Health Department of the county entertained with an informal "Get-together" July 28 at the Lamar County Health Center.

Best wishes were extended to Dr. John H. Venable, Medical Commissioner of the Tri-County Health Department. Dr. Venable left his position there to assume his new duties as Director of Education for the Georgia Department of Public Health, Atlanta.

A welcome was given Dr. Venable's successor, Dr. James R. Thomas, of Griffin. A short program was presented by Dr. J. A. Corry, Chairman of the Lamar County Health Department.

The first regular meeting of the Auxiliary of the Worth County Medical Society was held recently at the home of Mrs. W. P. Stoner of Sylvester. Mrs. Gordon P. Sumner, president of the Auxiliary, presided. Constitution and Bylaws were read by the secretary and approved and at this organizational session, committees for the year were appointed.

LETTERS

The Daily Times
Gainesville, Georgia
August 6, 1952

To the Editor:

The prize check of $50 arrived today. Thank you very much.

We appreciate the interest of the medical profession in a newspaper's effect on community health problems.

The *Daily Times,* of course, did not know that a prize was being offered for such endeavors at the time our articles were written, which makes us especially proud to be the winner of your contest. I think your award will stimulate a good deal of interest among weeklies and dailies during the coming years.

On another subject: I am chairman of Georgia's Freedom of Information Committee, appointed by the Georgia Press Association to work on matters pertaining to access to information.

You no doubt know that medical men and hospitals are often difficult sources of news. Several states have evolved hospital-press codes to specify limits and methods of cooperation between the two. We are interested in some such arrangement in Georgia and also in improving press-medical relations.

Cordially,
SYLVAN MEYER, Editor

Coffee County Progress
Douglas, Georgia
August 14, 1952

In behalf of the Coffee County Progress staff I want to thank your organization for the $50 check forwarded us for winning your first prize in the Georgia Press Association.

We especially were grateful for this prize since we did not even know one was being offered until the time was up, and used papers printed in our normal week.

We are thankful to you and your organization and pledge our continued efforts to serve our readers with the best Medical information possible.

Yours truly,
MELVIN C. WATERS, Editor

HOSPITALS

A new hospital in Nichols was opened to the public on August 1, when Dr. Charles Drake began use of the building for the first time since it was built two years ago. The small hospital built and financed locally.

The opening of a new heart clinic in Waycross brings to 10 the number of clinics in Georgia for diagnosis and treatment of heart disease. The Waycross clinic is located in the Ware County Health Center and is sponsored for the Georgia Heart As-

sociation by the Pilot Club in Waycross. Dr. Arthur M. Knight Jr., is chief of the clinic. Plans have been completed for the establishment of three additional heart clinics in Jesup, Thomasville and Gainesville.

Floyd County Hospital has opened a poliomyelitis treatment center to provide for polio patients in Northwest Georgia. At present the center occupies a wing in the hospital. It has space for 15 patients and can be expanded if need requires. The Floyd center will serve adjoining counties: Polk, Bartow, Gordon and Chatooga.

BOOKS

REVIEWS

Textbook of Pharmacology, by William T. Salter, M.D., Professor of Pharmacology, Yale University School of Medicine. Philadelphia. Published by W. B. Saunders Company, 1952.

The difficulty of keeping a textbook of pharmacology up to date is concrete evidence of the rapid development in the field of drug therapy during the past 25 years. The publication of Goodman and Gilman's text in 1940 represented a turning point in which the pharmacologist recognized his responsibility to clinical medicine. In 12 years, however, this text has become completely out of date and although a number of attempts have been made to replace it, none have been successful.

Salter's textbook represents a fresh approach to the problem which will be welcomed by teachers and clinicians alike. It is extensive (1240 pages) and discusses the fundamental aspects of the subject as well as practical application. The book is written in a style which reflects the unique personality of the author. While some may criticize his use of quotations and exclamation marks, nevertheless all of these tend to add color to what could be a dry subject. It is amply illustrated and attractively printed.

Salter's book will undoubtedly find acceptance as a reference. By the same token, however, its length will tend to detract from its usefulness as an introductory textbook for students.

—Arthur T. Richardson, M.D.

BOOKS RECEIVED

The following books have been received and the courtesy of the publisers is gratefully acknowledged. Reviews of books that have particular interest to Georgia doctors will appear as space permits. Additional information in regard to all books received will be gladly furnished by this office.

Pharmacology in Clinical Practice: By Harry Beckman, M.D., Director, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; and Consulting Physician, Milwaukee County General Hospital and Columbia Hospital, Milwaukee, Wisconsin. 839 pages with 152 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $12.50.

MISCELLANY

A handsome oak trophy case was presented Terrell High School in Dawson by Mrs. J. C. Tidmore and daughters in memory of the late Dr. Tidmore. His interest in the school athletic program made him greatly beloved by the faculty and student body. As team physician, Dr. Tidmore accompanied the football squad on most of the trips they made. He was instrumental in organizing the Touchdown Club in Dawson.

Dr. Charles S. McCall Jr., of Albany, has passed the tests of the American Board of Internal Medicine, achieving the distinction of being a qualified specialist in internal medicine.

Dr. L. H. Elder, practicing physician of Bogart for nearly 40 years was honored at a picnic supper attended by 200 friends recently. The dual purpose of the occasion was to express the community's appreciation for faithful service and to celebrate his 66th birthday.

Dr. C. F. Holton, of Savannah, President of the Medical Association of Georgia, delivered the address of welcome in behalf of the doctors of Georgia at the summer meeting of the Piedmont Proctologic Society, held in Savannah August 22-23.

The new directory of the Fulton County Medical Society contains the names of 746 physicians—the greatest number in the society's history. Dr. Jack C. Norris, of Atlanta, president of the society, points out that 40 new doctors have been added to the roster this year.

AMA Offers New Aid

A new program has been set up by the AMA to acquaint physicians newly-discharged from the armed forces with existing opportunities in private practice, industry, hospitals and medical schools throughout the country. Inaugurated by the Council on National Emergency Medical Service, the plan incidentally will provide replacement for physicians classified Priority I under the "Doctor Draft Law" who are now deferred from active military service because of essentiality. The Council will contact Armed Forces physicians before they are discharged to find out their post-service plans. If the doctor hasn't made any plans, he may indicate where he wishes to locate and in what field of medicine he is interested. This information will be sent to state medical societies.

Two New Journals

Volume I, Number 1, of a new monthly Journal entitled OBSTETRICS AND GYNECOLOGY, sponsored by the American Academy of Obstetrics and Gynecology, will appear January 1, 1953. It is believed to be the first new monthly periodical exclusively devoted to this field to be launched in over 30 years. The new journal will publish original articles, reviews, clinical notes, editorials and book reviews covering the entire range of clinical obstetrics and gynecology.

Another new journal, a bimonthly scientific publication "CIRCULATION RESEARCH" devoted exclusively to reports on fundamental studies related to heart and circulation, will be issued by the American Heart Association, beginning January 1953.

PRESS COMMENT:

GOP Oppose Socialized Medicine

Every American who is interested in bringing the nation's health standards to the highest possible level —as well as in the perpetuation of freedom—will approve of one plank adopted by the Republican Party at Chicago.

It is reported that this plank, when read, drew more applause from both the delegates and the galleries than any other part of the platform. On a number of occasions General Eisenhower has expressed his unequivocal disapproval of socialized or politically-dominated medicine, so it is certain that the plank is in accord with his views.

All partisan considerations to one side, the Republican Party's statement points to the only way in which the situation can be handled and improved. This fact is sharply underlined by the tragic experience of England and other countries, where socialized medicine has ominously reduced those standards, even as it has placed a tremendous burden on the taxpayers. In any enterprise or profession, the hand of the bureaucrat deadens and destroys, and medicine is no exception.

Socialized medicine may be a major issue in the coming campaign. General Eisenhower and the party he now leads have taken their stand—and it is the only stand consistent with American traditions, ideals, and hopes.

—Cordele Dispatch

THE JOURNAL

of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI OCTOBER, 1952 NUMBER 10

Editorials

ENURESIS

Parenthood is beset with all manner of frustrations and problems but none more perplexing than the management of bed wetting. The physician is not alone in his despair when confronted by the distraught mother who has long since tired of the increasing laundry load and the failures of her methods to cope with the problems. Usually the parental story runs the gamut of trial and error. Bribes are first offered in the form of sweet reward. Failure to comply with this adult inducement suggests defiance and the child receives a more bitter pill. Punishment is alternated with kindess and kindness with rational appeal. The alarm clock, repeated trips to the toilet, waterproof bedding and waterproof clothing eventually give way to an attitude of *laissez-faire*. However once the child reaches the age of introspection the problem becomes more acute. Invitations to spend the night out are accompanied by emotionalism out of all proportion to the event. After several such invitations have been rejected and the child appreciably affected, the parent may seek outside help.

More and more parents are turning to their physicians for assistance. Whether the physician consulted is the pediatrician, family physician or urologist, the advice should be the same. To dismiss the parent and the child with the age old statement: "he will outgrow it," is unfair to both parties and solves nothing. Usually a brief history will reveal certain underlying emotional factors many of which are correctable by suggestions well directed towards the parent and the child. However the decision to either dismiss the case or to give advice must await a complete genito-urinary history and physical examination as well as a careful urinalysis. If the nocturnal bed wetting is accompanied by other urinary symptoms or by an abnormal urinalysis, complete urological investigation is required. It has been established that diseases of the genito-urinary system never manifests themselves in bed wetting alone. But bed wetting might be a part of a symptom complex and it is for this reason that the physician must take a very careful history. When in doubt, simple measures of investigation can be pursued such as intravenous urography and when necessary cystoscopy. But be it emphasized that it is the rare exception when enuresis is the presenting symptom of a urological disease.

Where nocturnal enuresis is the only presenting symptom and urinalysis is normal, simple methods may attain remarkably quick results. Many patients respond promptly to brief private conversations with the physician. Others show good results with the psychotherapeutic efforts supplemented with ephedrine sulfate or banthine bromide in small doses. Of course there are those children who with their parents will require physiatric assistance after organic studies have been shown to be within normal limits. And there is that exceptional child who will require urological treatment before the desired results can be obtained.

—Peter L. Scardino, M.D.

DIAGNOSIS--USA

Every four years the United States needs an examination and a diagnosis of its political life. Every person over 21 years of age (except in Georgia where one has to be 18, who has registered and met the requirements has the opportunity to assist in this examination by going to the polls and casting his vote for a presidential candidate on November 4.

Lethargy is one of the most fatal diseases to American democracy because not too many qualified citizens are willing to take the time and effort to go to the polls and express their privilege of voting for the men and party which will administer their national government the next four years.

Every four years the percentage of eligible citizens voting in the United States has decreased. In 1880, 78.4 per cent of those eligible to vote went to the polls. In 1900 the percentage dropped to 73.5; in 1940 to 53.4, and 1948 only 51 per cent of the eligible voters went to the polls in the presidential election.

Nonvoting is a symptom of basic political apathy. To be sure it is only one sign, and a person can have a significant effect on politics even when he fails to vote. Like a fatal disease non-voting has eaten at the vital organs of our national life. Too often we fail to realize how much one vote does help to save the American way of life.

Records have shown the disease of lethargy is worse among professional groups who are the leading citizens in our communities than any other. What is the percentage among the doctors? When have you voted last? What are your plans on November 4? Are you too busy as a citizen to be able to go to the polls? Can you afford to be? For whom should you vote? No one should answer that question for you. The important thing is that you go to the polls on November 4 and by casting your vote help with other citizens the diagnosis of the ills of our National Government.

—Lyn Holland, Ph.D.,
Professor, Political Science
Emory University

AMA MEDICAL PR INSTITUTE

The biblical scribe who exhorted the physician to heal himself (or more appropriately, his situation) was perhaps the first tangible appearance of a genus later to spring forth in the mid-Twentieth Century and to be known as the "lay medical PR executive." And a majority of the medical profession today recognizes what might be termed as the "indispensability" of such.

Although the minority, on the other hand, may have every justifiable right to its opinion, it is a safe bet that its ranks would have considerably lessened in number were it, en masse, to have attended the first American Medical Association Medical Public Relations Institute at Chicago in September. Good, workable ideas abounded and were essentially dreamed-up, put to the test and then expounded on in behalf of doctors by these so-called medical lay-boys.

The two-day program was built around five panel discussions: Practical ways to increase physician participation in society activities; should the code of ethics be modernized to bring about better relations between mass media and the medical profession; how to develop the best working relationship between the medical profession and press-radio-television; tips to the medical profession in working with community groups and strengthening medical public service activities.

In gauging its popularity, let it be said that medical PR people were on hand from 41 states, Hawaii and Canada and represented in excess of 200 public relations medical society representatives and PR-minded physicians. Not only was the Medical Association of Georgia well-represented, but it donated the one woman speaker, Mrs. Shelley Davis, on the program who discussed how to work with women's clubs.

Meetings of this sort are making themselves felt in Georgia, as elsewhere. Public relations, in the last analysis, is little more than public service and physicians perforce must be reminded unceasingly of the fact. Our public relations directors and executive secretaries can well serve us in such capacity.

The AUXILIARY LOOKS *to the* FUTURE

The Woman's Auxiliary to the Medical Association of Georgia, with its 1,200 members, has a vigorous program of activities outlined for the year 1952-53 under the leadership of Mrs. Ralph Fowler, of Marietta. This year the principal aims will be to continue the important work of health education and public relations, to make a real contribution in civil defense, and to strengthen the ties of friendship and fellowship among the doctors and their families.

In the field of health education there are three special avenues through which this work will be promoted. Health days, or meetings open to the public, will be one avenue for improving our public relations and for disseminating information on health problems. In Augusta the open meeting will be on the subject of "Civilian Security." In Atlanta, the annual health education day had a panel discussion of "The Care of the Chronically Ill." For this program Dr. Dean Roberts, chairman of the National Commission on Chronic Illness, spoke and a panel composed of Atlanta experts discussed the local problems with suggestions as to their solutions.

Radio and television programs giving health information will also be presented throughout the state. In Atlanta, Dr. Dean Roberts and Dr. Minor Blackford appeared on one program in connection with the discussion of the chronically ill. It is also planned to present a series of broadcasts prepared by the American Medical Association on "The Best Is Yet To Be." This series on geriatrics will run for 13 consecutive weeks. Other programs will be listed over the state.

The Speakers' Bureau, of which Mrs. Eustace Allen is national chairman, will be an important part of health education. This will be supervised from the state level, but will be carried out on the local level. An excellent folder has been prepared by the Fulton County Auxiliary and has the following foreword:

> The Woman's Auxiliary to the Fulton County Medical Society, realizing the vital importance of authoritative information on problems of health, has outlined a program of health education and herewith is presented one phase of that program. A list of subjects has been compiled for lay presentation and, upon request, these subjects will be discussed by members of the Fulton County Medical Society, the City, County, and State Health departments, and by laymen prominent in their respective fields. If discussion of a subject not on the list is desired, a prompt survey of the available speakers will be made, and if there is one available to speak on the subject requested, the applicant will be notified immediately.
>
> These subjects may be discussed singly or in groups and many of them are illustrated with slides, charts, and motion pictures. When an organized body wishes to have a speaker address their organization on a health subject, a request should be made to one of the chairmen listed below. The chairman will contact the speaker who is prepared on the subject desired and the applicant will be notified promptly of the engagement.
>
> For those who wish to go into the subject more thoroughly, a bibliography will be furnished upon request. This work is being done in the interest of the community and there is no charge for the lectures.

A list of 100 subjects suitable for lay presentation is then given. A few of these subjects are: "Fatigue —A Common Complaint—Whan Can Be Done About It," "Living With Your Ulcer," "The Common Cold," "The Doctor's Contribution to the Community—Computed in Dollars and Cents." "The Georgia Plan for Voluntary Health Insurance," "State Medicine—Its True Significance and Pitfalls," "What Price Medical Care" and then various subjects are listed under the headings of Allergy, Cancer, Child Psychology, Civil Defense, Common Diseases, Dietetics—Foods, Heart Disease, Headache, Mental Hygiene, Orthopedics, Skin Diseases — Cosmetics, Tuberculosis, and Historical Subjects.

The Auxiliary believes that this Speakers' Bureau offers an excellent opportunity for public relations. Requests for speeches will be given to as many doctors as possible so that one doctor will not be burdened with too many requests. Should the doctor be unavoidably detained, a member of the Auxiliary will be prepared to give a talk on some phase of health education if the group so desires.

The Auxiliary wishes to continue to be in the forefront in the work of Civil Defense. Specific projects will be our work with the Red Cross, with Nurses' Recruitment, with the Civil Defense Director in each community, and with the Women's Division of the Civil Defense set-up in working on the "Home and Family Plan."

Doctors' wives are asked to take the first-aid and home-nursing courses. They are then urged to prepare themselves as instructors because the doctor's wife is a natural as instructor in these courses. A special drive for Nurses' Recruitment, with work in the high schools, the establishment of Future Nurses' Clubs, and the awarding of scholarships will be an important part of the work for Civil Defense.

Each Auxiliary has plans for fostering friendly relations between the members of the doctors' families. Each woman knows, as Mrs. Walquist pointed out in her address as president of the Woman's Auxiliary to the American Medical Association, "Friendship is earned—not sought—and we enjoy it as a by-product of WORKING TOGETHER FOR HEALTH." Through various worthwhile committees the doctors' wives will become acquainted with each other and, of course, there will be informal dinners and picnics and even formal affairs where the doctors and their wives can renew old friendships and make new ones.

Our Auxiliary activities parallel those of the Medical Association of Georgia, which has as its prime object the rendering of service to humanity, and we, the Auxiliary, wish to follow in that tradition and to serve as interpreters of the doctors who are doing so much for humanity. We believe that we have an important place in the program of public relations for the medical profession and our greatest desire is to serve forcefully and intelligently in any way which furthers the important work of our parent organization, the Medical Organization of Georgia.

—Mrs. Edgar M. Dunstan

CAST YOUR VOTE

Republican Platform Plank

"We recognize that the health of our people as well as their proper medical care cannot be maintained if subject to bureaucratic dictation. There should be a just division of responsibility between government, the physician, the voluntary hospital and the voluntary health insurance. *We are opposed to federal compulsory health insurance with its crushing cost, wasteful inefficiency, bureaucratic dead weight and debased standards of medical care.* We shall support those health activities by government which stimulate the development of adequate hospital services without federal interference in local administratoin. We favor support of scientific research. We pledge our continuous encouragement of improved methods of assuring health protection."

Democratic Party Plank

We will continue to work for better health for every American, especially our children. We pledge continued and wholehearted support for the campaign that modern medicine is waging against mental illness, cancer, heart disease and other diseases.

Research: We favor continued and vigorous support, from private and public sources, of research into the causes, prevention and cure of disease.

Medical Education: We advocate federal aid for medical education to help overcome the growing shortages of doctors, nurses, and other trained health personnel.

Hospitals and Health Centers: We pledge continued support for federal aid to hospital construction. We pledge increased federal aid to promote public health through preventive programs and health services, especially in rural areas.

Cost of Medical Care: We also advocate a resolute attack on the heavy financial hazard of serious illness. We recognize that the costs of modern medical care have grown to be prohibitive for many millions of people. We commend President Truman for establishing the non-partisan commission on the health needs of the nation to seek an acceptable solution of this urgent problem.

The Republican Party health platform plank was published in the August issue of the *Journal of The Medical Association of Georgia* and the Democratic Party health platform plank was published in the *Journal* September issue. They are both reprinted here, side by side, in an effort to stimulate interest in the November elections. This publication is not so much concerned with *how* you vote, but very concerned that *you do* vote.

THE EDITOR

Scientific Articles

CANCER *of the* STOMACH: OBJECTIVES *and* RESULTS *of Efforts to Increase* CURABILITY

JAMES T. PRIESTLY, M.D., Rochester, Minn.

Although treatment of cancer of the stomach has progressed considerably since Billroth performed the first successful partial gastrectomy for carcinoma of the stomach in 1871, there are still many discouraging aspects and unsolved problems in the management of this disease. The most important question relative to gastric carcinoma is how more cures can be obtained. Many efforts have been made to increase the curability of cancer of the stomach, and unfortunately, many of these have met with failure or only indefinite success. Some progress, however, has been made. So far as I know, no patient with cancer of the stomach has even been cured except by removal of the growth which makes the problem in its ultimate analysis largely the responsibility of the surgeon. That the problem is a large one is evidenced by the fact that an estimated 40,000 people die in this country each year from cancer of the stomach.

Efforts to Obtain More Cures

There appear to be five objectives of greatest importance in our efforts to cure more patients who have carcinoma of the stomach, namely: (1) an increase in the incidence of early diagnosis and accurate differential diagnosis, (2) an increase in operability, (3) an increase in resectability, (4) use of proper surgical procedure in resection of the stomach for cancer and (5) decrease in operative mortality. A brief discussion of each of these five objectives seems indicated.

Increase in the Incidence of Early Diagnosis and Accurate Differential Diagnosis

There seems little doubt that a small cancer, regardless of its location, permits greater opportunity for cure than a large cancer of the same type in the same location. Obviously, then, an increase in the incidence in the early diagnosis of carcinoma of the stomach should increase the ultimate curability rate of this lesion. What factors then are responsible for late diagnosis in cancer of the stomach and how can these be overcome? These factors may be divided into three categories, namely: those which pertain to the lesion, those which concern the patient and those which are the responsibility of the physician.

Unfortunately, it is true that cancer of the stomach, particularly in certain locations, may progress to considerable size and possibly extend to adjacent structures before it produces symptoms which cause the patient to consult his physician. This fact indicates an inherent quality of the growth which is difficult or impossible to overcome, at least to date, and there seems little at the present time that can be done about it. Much already has been done

Read at the meeting of the Medical Association of Georgia, Atlanta, Georgia, May 11 to 14, 1952.

relative to the "patient factor," and our efforts in this direction should continue. Unfortunately, many patients may neglect early symptoms of cancer of the stomach because they are considered insignificant. Later on the patient consults the physician but at this time the growth is found to be in an advanced stage. Efforts should be continued to inform the public at large of the possible serious significance of gastric symptoms which persist for as long as two weeks, and under these circumstances consultation with the family physician should be urged. Some patients postpone consulting a physician while a period of self-treatment is tried. Such practice, of course, should be discouraged as the patient himself is in no position to differentiate between serious and insignificant symptoms, especially within the first few weeks of their onset. Occasionally social or financial difficulties prevent the patient from consulting a physician, and efforts should be directed at obviating these circumstances.

The "physicians' factor" is definitely the responsibility of the medical profession. It means that we must be not only familiar with the early symptoms of cancer of the stomach, but constantly on the alert for them. Experience indicates that symptoms of early cancer of the stomach fall into three main categories, namely: the so-called typical history in which the patient has usually been well and healthy until the onset of persistent and progressive symptoms referable to the upper part of the gastrointestinal tract, the ulcer type of history in which symptoms suggestive of peptic ulcer occur and thirdly, a nondescript type of symptom complex in which general decline, loss of weight, loss of strength, anemia and vague indigestion are the predominant complaints. No patient should be treated for a presumed duodenal ulcer because of symptoms suggesting this lesion until roentgenologic examination of the stomach and duodenum have been performed. A high index of suspicion is essential for the recognition of early carcinoma of the stomach. It should be realized that approximately seven per cent of patients with cancer of the stomach are 40 years of age or less.

Furthermore, careful differential diagnosis is necessary if early neoplastic lesions of the stomach are to be detected. It should be realized that with more use of all the available diagnostic procedures, namely, roentgenologic examination, gastroscopy, cytologic studies of the gastric washings, analysis of gastric content, evaluation of clinical history and other essential data, that there will still be an error of approximately 10 per cent in the differential diagnosis of benign gastric ulcer and a small ulcerating carcinoma of the stomach. Because of this fact, surgical treatment is generally recommended for chronic gastric ulcer. If operation is not performed, the patient should be followed closely, both clinically and roentgenologically until the lesion has not only disappeared under medical management, but remains absent over a period of years. The hazard of malignancy in gastric polyps should be realized and they should either be removed or kept under observation for an indefinite period. Exploratory operation should be seriously considered and almost always recommended in any case in which the differential clinical diagnosis between a benign and malignant lesion of the stomach is uncertain.

Increase of Operability

If more patients are to be cured of carcinoma of the stomach, it is apparent that more patients with this lesion must be subjected to operation at a time when there is a reasonable chance that all malignant tissue can be removed. This can be done if the diagnosis is established early in a higher percentage of cases. The importance of the decision for or against exploratory operation must be fully realized, for if operation is not performed there is no known chance of cure at present. Therefore, with few exceptions, a patient should be denied exploratory operation and with it a chance of cure only on incontrovertible evidence. In other words, a surgeon should not be deterred from advising operation because of the advanced age of the patient, emaciation, presence of a palpable mass, anemia or other findings which although they reflect the probable presence of an extensive lesion, do not definitely indicate inoperability. Likewise, the findings on gastroscopic examination should not be considered an adequate indication of inoperability. The same is true of roentgenologic examination of the stomach. Although it is true that an experienced roentgenologist may be able to determine the operability of a gastric neoplasm in a rather high percentage of cases, it has been our experience in past years at the Mayo Clinic that resection can be performed on 14 per cent of patients who have been given a roentgenologic diagnosis of inoperable gastric neoplasms but who, despite this fact, were subjected to exporatory laparotomy. In general, the surgeon should accept as criteria of inoperability only such findings as a metastatically involved lymph node above or behind the medial end of the left clavicle—a so-called Virchow's node, an enlarged nodular liver, a metastatic umbilical implant, or metastatic lesions in the pelvis known as a "rectal shelf." There may, of course, be evidence of metastasis elsewhere in the body. If there is any question about the nature of the distant findings which suggest a metastatic neoplasm, biopsy will settle the issue.

Increase in Resectability

After exploration has been advised and the abdomen opened, the surgeon must decide whether the lesion can be removed. It is difficult to be dogmatic concerning criteria for resectability in the presence of a gastric neoplasm as well as a neoplasm elsewhere in the body. Any surgeon who operates for cancer of the stomach, however, should have not only the technical ability to proceed with satisfactory removal of an extensive lesion but also the courage to undertake what might appear to be a difficult and perhaps hazardous operation. In general, cancer of the stomach should be removed in all cases in which it seems

possible to extirpate not only the lesion but any and all of its areas of extension. In other cases, removal of the lesion as a palliative procedure may be undertaken although, of course, this type of operation has no part in increasing curability of cancer of the stomach. Obviously, surgical ability varies depending on the training and experience of the individual surgeon, but from the patient's point of view which is the primary concern, operation for cancer of the stomach should not be undertaken by one incapable of proceeding even though an extensive, but operable, lesion is found.

Actually, it appears somewhat doubtful to me if curability of cancer of the stomach will be greatly increased by the performance of very extensive surgical procedures which are required in the removal of a large, high-grade, gastric growth which has invaded adjacent structures; however, whenever possible, such a lesion should be removed. A recent review[3] indicates that of 50 patients on whom total gastrectomy was performed for extensive carcinoma of the stomach, 18 per cent were alive five years later. While this is not a very favorable outlook for the majority of patients in this group, nevertheless, it is quite a satisfactory outlook for those patients who are included in the group of nine who survived for five years after operation.

Use of the Proper Surgical Procedure

Although currently opinions differ regarding the surgical procedure which should be performed for removal of cancer of the stomach, I believe that the following five criteria embody the essentials of such an operation: (1) "en bloc" removal of the lesion and any local extension; (2) resection of stomach well beyond any microscopic evidence of neoplastic tissue in the gastric wall; (3) complete removal of all regions of lymphatic spread; (4) removal of gastrohepatic and gastrocolic omenta, the greater omentum and often the spleen and (5) resection of a portion of the duodenum or esophagus as the case may be if the growth approximates either of these structures.

A number of surgeons today recommend total gastrectomy in all cases of gastric carcinoma. It will take time to prove whether or not this practice is advisable. Personally, I am not yet convinced that it is the proper point of view. Obviously, gastric carcinoma spreads in many directions in addition to its spread in the gastric wall. Any operation for cancer of the stomach which is to survive the test of time must be based on a sound understanding of the pathologic process which in this instance as mentioned previously involves spread in numerous directions beyond the stomach.

A recent study by ReMine[2] is of interest in this regard. ReMine studied two groups of patients on whom gastric resection was performed for cancer. One group of patients died within a year after operation, and the other group lived for five years following gastric resection. Careful study of the pathologic specimens removed in these two groups of patients revealed that the most important differences between the two groups were the pathologic grade of the lesion, the presence or absence of involvement of lymph nodes, the number of lymph nodes involved and the greatest distance from the lesion at which an involved lymph node was found. Actually the distance of the line of resection in the stomach from microscopic evidence of neoplasm in the gastric wall was equidistant in both groups. This evidence does not suggest that total gastrectomy in all of these cases would have resulted in a higher percentage of cures if an equally radical resection of adjacent tissues can be performed by a properly executed subtotal gastrectomy. I believe that this can be accomplished if the lesion is not extensive.

Decrease in Operative Mortality

As is well known, the operative mortality of partial gastrectomy has been progressively reduced during the last few decades so that at present a mortality rate of approximately five to 10 per cent may reasonably be expected. This reduction in mortality has been brought about by a number of factors, including improved preoperative preparation of the patient from the point of view of nutrition, anemia, hydration, electrolytes and vitamins, also from improvements in anesthesia, probably some improvements in surgical technic and better postoperative care. Antibiotics, of course, have played a definite role. Efforts must be continued to decrease the operative mortality further and it seems likely that in ensuing years advances can be made in this regard.

Results of Treatment

Most reports on the results of surgical treatment of malignant lesions are based on the study of a large group of patients treated consecutively who have been followed for a period of five, 10 or more years after operation. Although such studies are of interest and contribute significant information, they do not afford an opportunity to determine whether improved results are being obtained in recent years as compared with earlier years. In other words they do not answer the question: "Have all the efforts which have been made to improve results of treatment of a given neoplasm, such as cancer of the stomach resulted in benefits to the patient?" A study has been completed recently[1] which provides an encouraging answer to this question with regard to carcinoma of the stomach.

All patients who were given a diagnosis of cancer of the stomach seen at the Mayo Clinic from 1907 to 1949 inclusive were included in the study. In order to determine whether results obtained in recent years were superior to those of former years, two groups of patients were compared, namely those seen in the years 1907 through 1916 and those seen from 1940 through 1949. In the comparative study of these two groups of patients, it becomes apparent that improvements in operability, resectability, operative mortality and postoperative survival have occurred (table 1). Thus, of each 100 patients in the earlier group only five were found to be living five years later (fig. 1). In contrast, it is estimated that of each 100 patients in the later group, 14 will

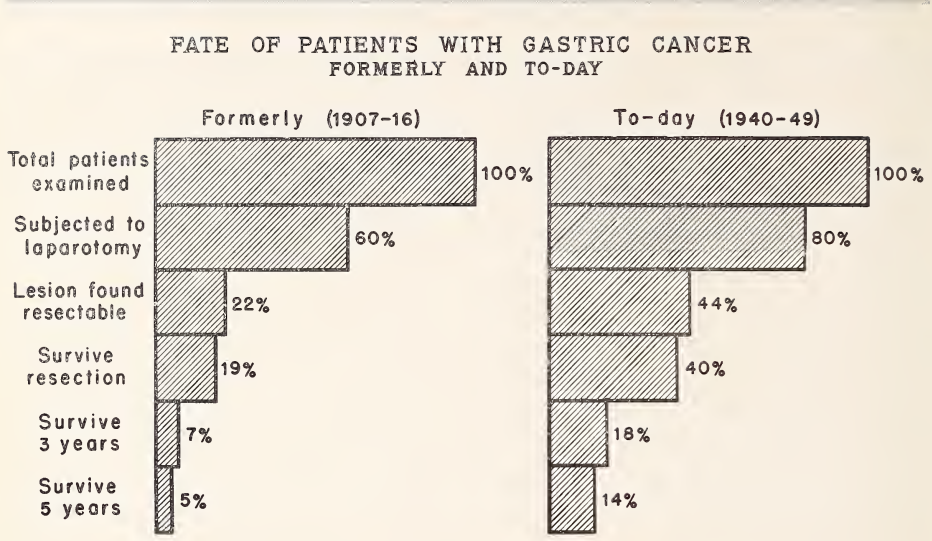


Fig. 1. Improvement of outlook for patients having gastric cancer in the ten years, 1940 to 1949, as compared with 1907 to 1916. From: Berkson, Joseph, Walters, Waltman, Gray, H. K. and Priestley, J. T.: Mortality and Survival in Cancer of the Stomach: A Statistical Summary of the Experience of the Mayo Clinic. Proc. Staff Meet., Mayo Clin. 27: 137-151 (Apr. 9) 1952.

be living five years after operation. Although an increase of only nine survivors out of 100 patients may not be striking, looked at another way, it represents an improvement of 180 per cent.

TABLE 1

CANCER OF THE STOMACH: IMPROVEMENT OF OUTLOOK

Rate	Per cent of cases 1907-1916	Per cent of cases 1940-1949	Improvement, per cent*
Operability	60	80	33
Resectability	37	55	48
Hospital mortality	16	8	100
3-year survival	39	43	10
5-year survival	29	35	20

*Based on lower of the two figures.

If the results are considered in another manner, it was learned that despite an increase in operability from 60 to 80 per cent (improvement of 33 per cent), there also has been an increase in the resectability rate of those patients who are subjected to laparotomy from 37 to 55 per cent. This represents an improvement of 48 per cent. Operative mortality has been reduced from an average of 16 per cent in the earlier group to eight per cent in the more recent group. Likewise, of the group of patients who have undergone gastric resection and did not die during the postoperative period, it is estimated that 35 per cent now live for five years as compared with 29 per cent in the earlier group. It is apparent, therefore, that the results of treatment of gastric carcinoma have improved, and although the advances are not as great as one would like, there is reason for encouragement with the hope that further efforts will result in greater gains in the management of this serious disease.

REFERENCES

1. Berkson, Joseph, Walters, Waltman, Gray, H. K. and Priestley, J. T.: Mortality and Survival in Cancer of the Stomach: A Statistical Summary of the Experience of the Mayo Clinic. Proc. Staff. Meet., Mayo Clin. 27:137-151 (Apr. 9) 1952.

2. ReMine, W. H.: Unpublished data.

3. ReMine, W. H. and Priestley, J. T.: Late Results After Total Gastrectomy. Surg., Gynec. & Obst. 94:519-525 (May) 1952.

MURDOCK EQUEN, M.D., GEORGE ROACH, M.D. and *ROBERT BROWN, M.D.*
Atlanta

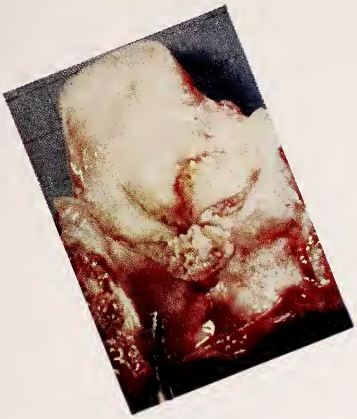


Fig. I. Carcinoma involving the anterior commissure and extending subglottically.

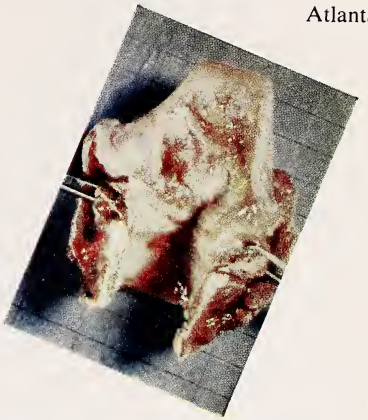


Fig. II. Carcinoma involving the entire left cord, supraglottic area and epiglottic region.

CANCER

Of The

LARYNX

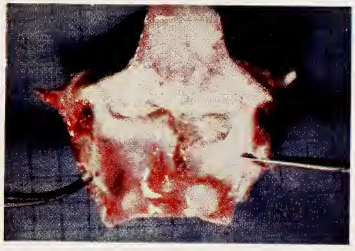


Fig. III. Carcinoma involving the anterior commissure, the anterior and middle third of the right cord with fixation and extending subglottically.

Cancer, man's ancient enemy, now strikes one in five. It is the most feared killer in middle and later life. As otolaryngologists, we would like to remind you of some of the facts about carcinoma of the larynx and place before you some of the questions concerning it.

Incidence

In the United States today some 210,000 persons (3,339 in Georgia alone) died of cancer last year. Malignant growths of the larynx, almost always carcinoma, account for approximately five per cent of all cancers. Cancer of the larynx has never been reported in Eskimos or in the natives of central Africa. It is uncommon in Negroes, especially Negro women. Cancer of the larynx is far more important than would be suggested by the frequency with which the general practitioner or the general surgeon encounters it. It occurs most often in men beyond their prime who smoke excessively and who abuse their voice. In our statistics at the Ponce de Leon Infirmary only 10 per cent of the patients with carcinoma of the larynx were women.

This disease is rare in children, but several cases have been reported in the literature. Our youngest patient, in his middle thirties, had developed papillomas of the larynx while a cheer leader at Georgia Tech. His career took him to other parts of the country and from time to time papillomas were removed at various laryngological clinics. After he came back to Atlanta he reported to the Ponce de Leon Infirmary; at this time biopsy showed malignant changes and we removed his larynx.

The oldest patient reported in the literature was in the ninth decade. Age is by no means a contra-

From Ponce de Leon Eye, Ear, Nose and Throat Infirmary. Read before the Section on Surgery Annual Session of the Medical Association of Georgia, Atlanta, May 13, 1952.

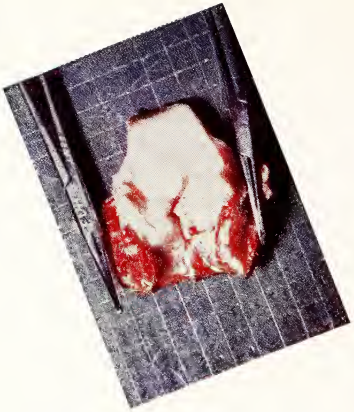


Fig. IV. Carcinoma involving the right cord, extending subglottically, the anterior commissure and the anterior third of the left cord.

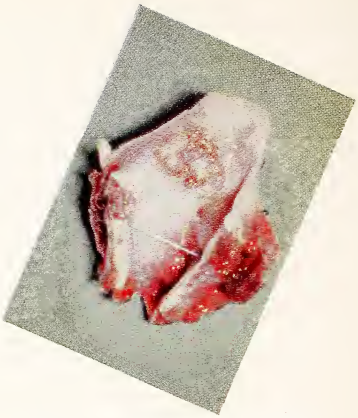


Fig. VII. Carcinoma of the epiglottis and supraglottic area above the left cord and involving the false cord.

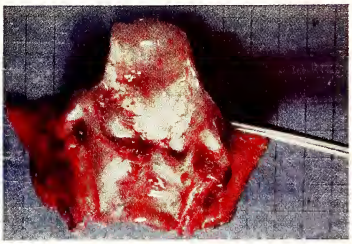


Fig. V. Carcinoma involving the anterior and middle half of the left cord, up to the anterior commissure.

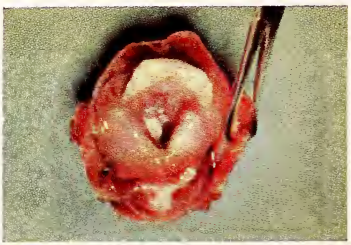


Fig. VIII. Carcinoma of the entire larynx as viewed from above as would be seen on direct laryngoscopy.



Fig. VI. Carcinoma involving the entire left cord, extending subglottically, the anterior commissure and the anterior third of the right cord.



Fig. IX. Shows the larynx of figure VIII, opened posterially showing the carcinoma involving the entire left cord and extending supra and subglottically, the anterior commissure and the right cord to a lesser extent.

indication to surgery.* Our oldest patient at the time of operation was 75; after an uneventful convalescence three years ago he is now the active president of the Georgia Laryngectomy Association, Inc.

The early symptoms cannot be emphasized too often to you, the front line defense, because if an early diagnosis is made, prompt treatment offers the patient a better chance for cure than is possible in any other type of cancer.

Symptomatology

Symtoms vary with the location and extent of the lesion. The general practitioner should be ever mindful that *hoarseness is not a disease* but a symptom of some organic change in the larynx. Such a change may be of no danger to the patient, but all too often, the physician procrastinates until the causative cancer is inoperable. The laryngologist should make both the profession and the public realize the significance of hoarseness lasting more than two weeks; the laryngologist has not stressed with sufficient force that early intrinsic carcinoma of the larynx produces no pain or discomfort of any kind, and until he does make the public realize this, many will ignore the warning of persistent hoarseness until the lesion has become far advanced.

Hoarseness is inevitable when the true cords are involved by cancer. It is the first and usually the only symptom of carcinoma in this location. Early lesions adjacent to the cords, either above or below, usually cause some edema or impair motion of the cords. This is manifested by noticeable voice change.

In discussing hoarseness, we would remind you that in most cases of acute laryngitis, response is quickly gained on a regime of voice rest with supportive treatment, but if the hoarseness persists after more than two weeks of such treatment, you must realize that a more serious condition may be present and the cause of the hoarseness must be determined.

The following is a list of the principal causes of hoarseness:

1. Hysterical Aphonia
2. Neoplastic:
    a. singer's nodule
    b. papilloma
    c. polyp
    d. varices
    e. fibroma
    f. hyperkeratosis
    g. carcinoma

(And this is the order in seriousness and disaster)

3. Inflammatory:
    a. tuberculosis
    b. syphilis
    c. diphtheria

(The Public Health Department has done much to diminish tuberculosis of the larynx and syphilis of the larynx as well as diphtheria. They are to be commended.

4. Neurologic
    a. Central
    b. Peripheral, such as
        I. Thyroidectomy
        II. Nerve damage
        III. Carcinoma of the lung
        IV. Aortic Aneurysm

The laryngologist is frequently confronted with hysterical aphonia which is characterized by transient bouts of hoarseness. It is surprising to the patient and to his relatives that he can phonate for the examiner while the mirror is in place, but cannot speak above a whisper while engaging in conversation. The larynx in such cases is normal.

"Singer's nodules" cause a hoarseness that is progressive and that may disappear on voice rest and education, but often they must be removed surgically. Usually the nodules are small, smooth processes which occur on the true vocal cords at the junction of its anterior and middle third.

Papillomas of the larynx occur at any point in the voice box and they may be transplanted to the trachea; they are pre-malignant and are prone to recur after removal. They may be so profuse that they embarrass respiration. They are most typically found in children: apparently they commonly result from irritation of the larynx caused by their attempt to make a noise like a machine gun or an airplane.

Laryngeal polyps may be present many years without causing marked symptoms. The voice may remain remarkably clear when the polyp lies above the cord but the patient will experience hoarseness on abuse of his voice. If the polyp falls between the cords they will cause momentary hoarseness.

Laryngeal varcies are rather rare; they may be small and the hoarseness may not be very noticeable.

Hyperkeratosis is pre-malignant and malignant degeneration may be prevented by early removal.

Carcinoma

Carcinoma most often attacks the anterior third of one cord and it is curable if it is cut out in the early stages, because carcinoma of the larynx metastasizes late. Pain does not occur until the cancer is far advanced and the pain may be referred to some other part of the head or neck, most commonly to the ear on the side involved rather than to the throat. Unfortunately, these patients are sometimes treated for neuralgia. When there is a history of hoarseness and pain, coughing and expectoration of blood, dysphagia and difficulty in breathing, all late symptoms, there is an extension of the disease beyond the larynx.

Extrinsic lesions may not cause hoarseness until they have become extensive; unfortunately, pain is a late symptom. There is usually a sensation of fullness, some discomfort, a constant urge to clear the throat and excessive saliva.

Any patient with such symptoms, or even a vague discomfort on swallowing, talking or coughing, should be a candidate for careful study at frequent intervals. Biopsy is imperative in all cases where a lesion suggesting carcinoma does not rapidly respond to conservative measures. All too often metastatic masses in the neck are the presenting signs of extrinsic lesions.

Carcinoma of the larynx cannot be diagnosed

without biopsy.

Treatment

In dealing with this disease one must realize that the first shot is the best shot; we do not wish to appear radical but we would like to emphasize that your first chance is your best chance and that thorough surgical extirpation of an early growth will result in a cure. Carcinomas that involve the base of the epiglottis, because of the sparcity of symptoms, are not usually seen until they have infiltrated deeply and extended by way of the lymphatics to the pre-epiglottic space. Laryngectomy and total removal of the hyoid bone and pre-epiglottic space will give the best results in this type. The same holds true for the subglottic lesion.

Some fortunate laryngologists occasionally see carcinoma of the cord that can be removed from above through natural channels. It is not uncommon to be able to excise the carcinoma by splitting the thyroid cartilage. At the Ponce de Leon Infirmary we have done 44 laryngofissures, five of them in women, and, so far as we know, only two of these patients have died. This is essentially the 95 per cent cure reported in other well known laryngologic clinics.

Recently several papers have appeared in which the results of x-ray treatment of early lesions were reported as good as those of surgery; most authors, however, still agree with us that surgery is surer.

In moderately advanced cases hemilaryngectomy is advocated by some surgeons. In carefully selected cases this operation is curative without causing much disfigurement or much difficulty in speech, but if any carcinomatous cells are left, the patient has lost all chance of a cure. We have had no experience with it for we believe that in case of doubt, radical extripation is safer.

In our practice, advanced carcinoma is common. We have done 107 laryngectomies (97 in men, 10 in women) in the past 20 years. Fifteen of these patients we know are dead, but some of these were already elderly when they were operated upon 20 years ago and we do not know how many of these deaths were due to cancer. We have been able to trace 80 per cent of the others.

Following total laryngectomy, if we have found any manifest metastasis in the neck, radical dissection of the cervical glands is done. In the absence of evident metastasis we believe that x-ray treatment causes the patient less pain and less immediate risk than radical dissection. Only time will tell whether the ultimate results of these two methods are equally good.

The success of the laryngectomy depends upon the most rigid adherence to the fundamental principles of surgery and the liberal use of the antibiotics. Primary closure is usually possible today.

When the cancer has infiltrated so widely that operation is out of the question, we recommend radiotherapy, partly to satisfy the patient and his family that everything possible is being done. The radiologist, of course, would prefer to treat patients he has a better chance to cure, but sometimes he is surprised at the results in these far advanced cases.

Rehabilitation

Rehabilitation is one of the most important aspects of the treatment of cancer, particularly cancer of the larynx. Communication with one's fellow man places him on the high level that he enjoys. Although laryngectomy is a radical and seemingly catastrophic operation, it is a life-saving procedure and the patients can be adjusted to pick up their lives where they left off and it is most important to stress this point.

Rehabilitation is not postponed until after laryngectomy; we feel that it is important to start the patient's rehabilitation when he is told that he has cancer. We make the patient belch and when he does so we explain that proves that he will be able to talk again after he has lost his larynx. Most patients under proper guidance can quickly learn the fundamentals of an esophageal voice and develop speech on their own initiative. This is easier if they have the help of cheerful extroverts who have lost their own larynx. The voices they develop surprise the patients themselves. Esophageal voices had been developed before World War II but it was less trouble to the patient to buy a gadget. During the war these artificial larynges were not available and the patient had his choice of developing an esophageal voice or remaining silent. This impetus to the popularization of esophageal speech may be considered one of the very few good results to come out of World War II.

If the patient is permitted to be lazy or finds it impossible to develop esophageal speech, he may use the electric larynx or the reed tube of the Bell Telephone Company.

In the state of Georgia the Division of Vocational Rehabilitation financially enables laryngectomy patients to take esophageal speech training. Patients will be presented now to illustrate each type of voice.

Summary

Cancer of the larynx may be divided into supraglottic, subglottic and glottic lesions. The supraglottic cancer of the larynx is often poorly differentiated and tends to spread rapidly, destroying cartilage; it tends to recur after laryngectomy. Subglottic cancers are often differentiated tumors which tend to block the airpassages and infiltrate the anterior wall of the esophagus.

The large majority of cancers of the larynx are glottic; that is, they involve the vocal cords.

Invariably the early symptoms of carcinoma of the vocal cord is hoarseness. If this symptom leads to prompt recognition of the cancer, prompt surgical intervention offers a 95 per cent chance of cure. If the cancer is advanced, the more radical operation of total laryngectomy is indicated. The horror with which this operation was formerly regarded, and justly so, may be greatly alleviated by beginning rehabilitation measures as soon as the operation is advised. The man who has developed a satisfactory esophageal voice after he has lost his larynx can resume his place in the economic world and lead a happy life.

McCLAREN JOHNSON, M.D., Atlanta

PROLAPSING GASTRIC MUCOSA:

A Review of 117 Cases in a Private Practice

The fact that a portion of the gastric mucous membrane can slip through the pylorus into the duodenum has been known for some time, but it is still a controversial topic. Although 224 cases have been reported in the literature to date, the medical profession is definitely not of one mind on the subject. Many physicians do not recognize it as a clinical entity. Others consider it serious enough to require radical surgery as a routine procedure. In between these extremes are many who acknowledge its importance, but consider it quite rare.

It is not too difficult to understand this lack of agreement. Quite naturally, the earlier cases reported were serious; it was that fact which led to their being recognized at all. Later, when it became known that the condition could be recognized by x-ray examination, many authors hesitated to report cases which had not been confirmed surgically. This strengthened the impression that all cases were serious; those which escaped operation were not reported. The persisting impression that prolapse of the gastric mucosa means an operation has undoubtedly created in many minds an unconscious prejudice against the whole idea.

Further confusion has been added by a lack of agreement among those who must make the x-ray diagnosis. Many examiners have been accustomed to accept the filling defects produced by prolapsing mucosa as normal variations in the pyloroduodenal outline. I know I missed many prolapses because I had been taught about the so-called "pyloric star" in my early years and mistook some prolapse defects for that. Many roentgenologists do not make this diagnosis at all. Others vary in their opinions as to which cases should be reported and which are not worth mention. Thus a patient may be told by one examiner that his stomach and duodenum are normal, by another that he has an interesting but harmless anomaly, and by a third that he has a condition which should be taken very seriously.

Agreement Urgently Needed

Whatever the reasons for this disagreement, we should make every effort to reduce it. To the patient it is not merely an academic problem. Some patients are being denied the relief they might enjoy. Others are being subjected to operations they do not need. We cannot solve this problem by taking sides; either error is bad, and to avoid one by making the other is not the answer. Norgore and Schuler[21] cite instances of patients in a Navy hospital who were labeled as malingerers until they were recognized as cases of prolapsing gastric mucosa. After corrective surgery they were restored to active duty. Scott[22] points out that in the Navy the correct differentiation between mucosal prolapse and a peptic ulcer may affect a man's entire career. An ulcer diagnosis may result in failure of promotion or even separation from service, whereas prolapse cases can be rehabilitated and returned to full activity.

This has far-reaching implications when considered in the light of a patient's insurability in civilian life. Sooner or later the insurance companies are going to raise this question. Unless we have more unity of opinion, the patients of some doctors will be unjustly rated or rejected, while others will be accepted simply because their physicians do not make this diagnosis.

While we have just seen the harm that can result from failure to recognize prolapse of the mucosa, we should also look at the other side of the picture. I was disturbed recently to hear that one patient had a sub-total gastrectomy simply because he had an x-ray diagnosis of mucosal prolapse. I asked him if his symptoms were relieved by the operation. He seemed surprised at the question, and replied, "Oh, I wasn't having any symptoms. They operated just because it wasn't going away." Maybe this is why some roentgenologists feel that they should soft-pedal this diagnosis!

It becomes quite clear that there is an urgent need for a better understanding of this problem. As the recognition of prolapsing gastric mucosa increases

Read at the General Session of the One Hundred Second Annual Session of the Medical Association of Georgia, May 13, 1952.

the hazard of ill-advised treatment will likewise increase. Opinions on this subject too often are based on only a few personal experiences, or on extremely sketchy contacts with the literature. It is with that thought that I am here reporting 117 of my own cases, not to support any particular point of view, but rather to review the cases and let the findings speak for themselves.

Prolapsed Gastric Mucosa Defined

Each presentation of this subject reaches a segment of the profession to whom it is new. From this segment there come two questions which should be answered before proceeding with statistics and arguments: (1) What is meant by prolapsing gastric mucosa? (2) How can it be recognized? All the answers cannot be found in textbooks. In 1943 Bockus[18] devoted a half-page to it in his three-volume "Gastroenterology," and in 1950 Harrison's "Principles of Internal Medicine," included a paragraph by Machella[41]. In Sandweiss'[48] "Peptic Ulcer" (1951) it is briefly mentioned by Templeton and by Wilbur.

The condition we are discussing here involves a redundancy of the mucosal folds in the pre-pyloric region (Fig. 21). If these folds are sufficiently long

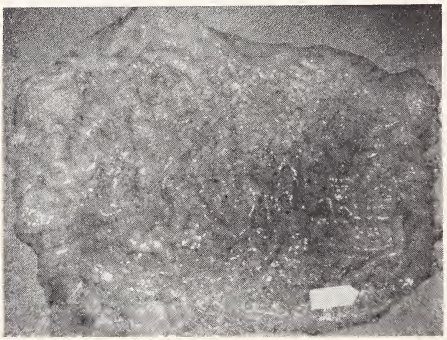


Fig. 21. Redundant mucosal folds in the resected specimen from Case 110, a 23-year-old white male with achlorhydria, hematemesis, and melena. Dr. Warren S. Dorough did a subtotal gastrectomy. The prolapse did not influence the decision to operate, nor the choice of operation. The white marker is not a pointer, but a specimen label.

and sufficiently loose they can be "washed" through the pylorus and into the duodenum during normal peristalsis (see Golden's work on antral systole)[12]. This extrusion of the redundant membrane can cause various symptoms referable to the pyloro-duodenal area. These symptoms vary according to the thickness of the extruded membrane, the degree of spasm in the pylorus, the depth of the extrusion, and other factors. Among the symptoms are pain, fullness, nausea, and vomiting.

There is a tendency for the symptoms to be made worse by food, and there is often vomiting without much nausea. In some cases the prolapsed membrane becomes strangulated and cannot be retracted, even at operation. In others it becomes eroded and may bleed. Quite a few cases of massive hemorrhage have resulted from this cause alone. (For two detailed studies on the reaction of the gastric mucosa to injury, see Schindler, Necheles, and Gold[15], and Wolf and Wolff[19]). Sometimes a true ulceration develops on the prolapsed portion, and it can co-exist with true duodenal ulcer.

The first known instance of a mucosal fold occluding the pyloric opening was reported by von Schmieden[1] in 1911. However, his report does not mention actual extrusion into the duodenum. In 1925 Eliason and Wright[3] described a case in which they found a complete cuff of redundant gastric mucous membrane slipping through the pylorus and palpable as a doughy mass in the duodenum at operation. During palpation it slipped back into the stomach, but when the stomach was opened it could again be pushed into the duodenum. The following year (1926) Eliason, Pendergrass, and Wright[4] reported two more cases, and listed diagnostic criteria for the x-ray demonstration of pedunculated growths and prolapsed mucosa. In 1931 Meyer and Singer[6] reported another case and discovered von Schmieden's report, which they quoted.

I have already mentioned the serious nature of the earlier cases in the literature. Pendergrass and Andrews[9] felt that all cases were surgical. Rees[11] shared that opinion. The case reported by Bohrer and Copleman[13] had severe hematemesis. Two of the cases reported by Archer and Cooper[14] had hematemesis and melena, a third had melena only. Rubin[16] reported a case with carcinomatous degeneration. Though this malignant change arose from a polyp, it is mentioned because the polyp was attached to the redundant mucosa.

This gives an idea of the impression created by the earlier reports. No wonder these authors felt that surgical treatment was indicated! However, by the time the 19th case was reported there was a trend toward including non-surgical cases. Rees[11] had already reported one case (out of his four) which was not confirmed by surgery; Melamed and Hiller[20] reported one surgically confirmed and three that were not. From then on, though the surgical cases continued to be reported, there was an increasing tendency to include the cases which got relief without operation.

Table 1 shows the list of authors and the cases they reported, in chronological order of publication. Though he is not listed among the published reports, I want to mention Dr. Leonard Long[43], roentgenologist at the Georgia Baptist Hospital, whose review of the subject at a 1950 staff meeting played a large part in stimulating the study I have undertaken.

Strictly speaking, the term prolapsing gastric mucosa is not as exact as it should be. Norgore and Shuler[21] felt that extrusion of the gastric mucosa through the pylorus would be more accurate, for prolapse, literally interpreted, means only a dropping

TABLE 1

PROLAPSING GASTRIC MUCOSA: A REVIEW OF 117 CASES IN PRIVATE PRACTICE

Case Reports in Order of Publication

1911	Von Schmieden[1]	1
1925	Eliason and Wright[3]	1
1926	Eliason, Pendergrass, and Wright[3]	2
1931	Meyer (K. A.) and Singer[6]	1
1932	Shiflett[7]	1
1935	Pendergrass and Andrews[9]	3
1935	Meyer (W. H.)[10]	1
1937	Rees[11]	4
1938	Bohrer and Copleman[13]	1
1939	Archer and Cooper[14]	4
1942	Rubin[16]	1
1943	Melamed (A.) and Hiller[20]	1
1945	Norgore and Shuler[21]	2
1946	Scott[22]	14
1946	MacKenzie, MacLeod, and Bouchard[23]	2
1947	Appleby[24]	7
1947	Bralow and Melamed (M.)[25]	4
1947	Bralow and Spellberg[27]	1
1948	Nygaard and Lewitan[28]	7
1948	Manning and Highsmith[29]	16
1948	Ferguson[30]	6
1948	Zacho[31]	2
1948	Van Noate, Arnold, and Palmer[32]	7
1949	Cove and Curphey[33]	22
1949	Hawley, Meyer (P. D.), and Felson[34]	35
1949	Melamed and Melamed[35]	4
1949	Ellison and Squire[36]	6
1949	Moon and Speed[37]	1
1950	Manning and Gunter[39]	6
1950	Harris and Byrne[40]	30
1950	Bralow, Becker, Scheinberg, and Necheles[42]	5
1950	Rudner[44]	22
1950	Artz and Gants[45]	1
1950	Clifford, McCallen, and Keschner[46]	1
1951	McGinty[47]	3
	Total cases reported by March, 1951	224

(Note: 32 additional cases were mentioned, but not reported, by the above authors as follows: Melamed (A.) and Hiller, 3; Ferguson, 17; Van Noate, Arnold, and Palmer, 3; Bralow and Spellberg, 2; MacKenzie, MacLeod, and Bouchard, 7.)

down. Moersch and Weir[17], for example, have reported a case of prolapsing gastric mucosa which did not go through the pylorus because it started high on the posterior wall of the stomach. Josephine Wells[26] has reported a case of gastric mucosa prolapsing into the esophagus. In this paper are included only those cases in which there is actual extrusion through the pylorus and into the duodenum, and it is called prolapsing gastric mucosa because common usage has made that terminology acceptable.

Etiology

Various theories have been advanced to explain the occurrence of prolapsed mucosa. In 1923 (two years before the first report of gastric mucosa passing into the duodenum), Forssell[2] showed that the muscularis mucosae was capable of independent motion, and was largely responsible for the rugal folds. Many authors have explained the redundancy on the basis of his work. In 1937 Golden[12] gave a classic description of antral systole, picturing vividly the caudad motion of the folds. Eliason and Wright[3] felt that chronic irritation and inflammation were necessary precursors of the redundancy. Rees[11] felt that hypertrophy of the pyloric muscle was the initiating factor. Many authors have found this hypertrophy at operation, and it was found in two cases of my series. Some writers do not mention it. Melamed and Hiller[20] reported one case with a relaxed pyloric canal, but in this case the prolapsing mucosa arose some inches above the pylorus, and if it had not been six inches long it would not have reached the pylorus at all. This was not an antral redundancy, such as I am discussing here, and such as Rees had in mind. I do not feel that this case really has any bearing on Rees's theory. Bralow and Spellberg[26] suggested the possibility that a duodenal or pyloric ulcer might precede the redundancy and prolapse. Scott[21] suggested that the hyperperistalsis resulting in redundancy is stimulated by chemical and neurogenic factors. In the various case reports in the literature there are some instances to support every one of these theories. Manning and Gunter[39], for example, reported six cases with autopsy findings. Five of these had microscopic reports showing chronic inflammatory changes; in the sixth case the specimen was accidentally lost. Other authors often report no inflammatory changes at all. This series will not throw any light on the etiological aspects of this problem, since so few surgical cases are included.

Diagnosis

The diagnosis is fundamentally roentgenologic. While an occasional case may be suspected before the diagnosis is established (as will be shown later) there is no possible confirmation except by x-ray examination or by operation. It is important to visualize what is happening when we try to understand the films on these cases. More than one author has compared the prolapsing membrane to hemorrhoids, and some of the illustrations of surgical specimens bear a striking resemblance to a rosette of protruding hemorrhoids (Fig. 22). This condition is simply an invagination of the gastric mucous membrane into the duodenum, usually in the form of a complete circular cuff, and it is basically the same as an intussusception except that all of the layers are not involved.

The duodenal bulb is usually smooth and rounded, but the base has an invaginated appearance, characterized by deep cupping, and described as an umbrella shape or a mushroom shape. In some cases it resembles a water spout. The defect should involve both sides of the bulb, and if only one side is involved the possibility of a polyp must be considered. The defect in the two sides need not be wholly symmetrical, however. One side of the pylorus may show a larger shadow than the other due to the angle at which the axis of the bulb meets the axis of the pyloric canal (Figs. 2, 3, 10, 12). Sometimes the defect is one large shadow; at other times it may be divided into several lobules (Fig. 15). In Fig. 8 the lobules form the shape of flower petals. In many cases the rugal lines of the extruded mucosa can be traced through the pylorus and into the base of the cap (Figs. 2, 4, 9, 10). Scott has stated that if only



FIG. 1

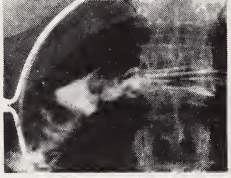


FIG. 2



FIG. 3



FIG. 4

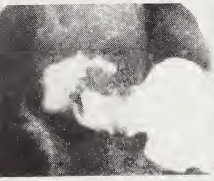


FIG. 5



FIG. 6



FIG. 7



FIG. 8

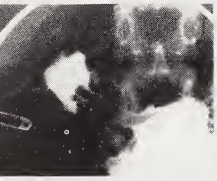


FIG. 9

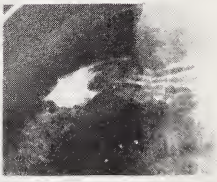


FIG. 10



FIG. 11

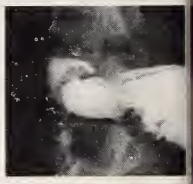


FIG. 12



FIG. 13

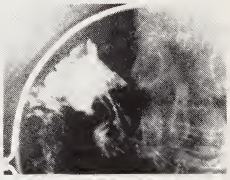


FIG. 14



FIG. 15

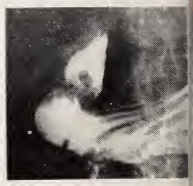


FIG. 16

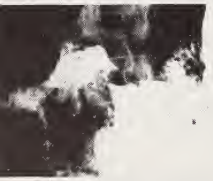


FIG. 17



FIG. 18



FIG. 19



FIG. 20

Fig. 1-20. Variations in the pyloroduodenal outline as a result of prolapsing gastric mucosa. All the above films are from cases in this s
In this group an attempt is made to show the most varied defects, rathe rthan the most typical. Figs. 19 and 20 are from the same pa
(Case 110). Fig. 3 shows a duodenal diverticulum, in addition to the prolapse. The small ovoid radiolucent spots on several of the pic
are artifacts.

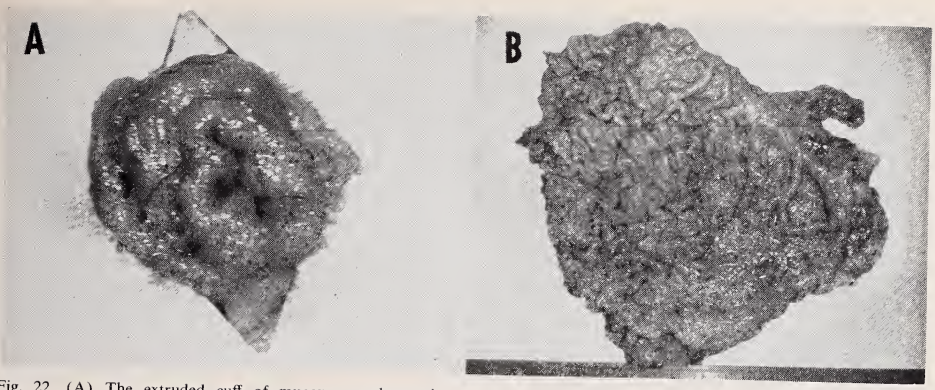


Fig. 22. (A) The extruded cuff of mucous membrane in Case 45, viewed from the duodenal side of the pylorus. (B) The redundant folds in the resected specimen from Case 45.

one rugal fold is seen it is not sufficient to support the diagnosis. That is not always true, and the other evidence may be sufficiently strong to make the diagnosis in the absence of this finding. Due to difficulty in positioning the patient, the base of the bulb may overlap the antrum, and in this situation the rugal folds are obscured (Fig. 12). Also, we can assume that if there is sufficient pylorospasm all barium might be squeezed from between the folds so that no rugal lines could be traced at all. However, the defects in the bulb are so characteristic that these cases are seldom confusing to the experienced observer. A well-defined ring of barium around the periphery of the bulb, with a partially radiolucent lumen, means that something is occupying the greater part of the lumen, and that "something" is usually redundant gastric mucosa. Earlier in this paper I referred to the pyloric star. When the bulb points directly away from the observer, so that he is looking at the base, the folds of the pylorus itself may form a stellate pattern. Some roentgenologists still explain many defects on that basis. Just where to draw the line in this situation is not clear, but until that question is answered we should remember that prolapsing mucosa was unheard of when the pyloric star was first described, and it was the only explanation available for that appearance at that time. I have one very poorly demonstrated case which has been confirmed by operation (Fig. 23).

This shows that the diagnosis can be made — and confirmed by surgery—without any of the classical signs which I have mentioned. The classical cases can be recognized quite readily after becoming familiar with their appearance. Other cases can be recognized only by the experienced observer. No debatable cases are included in the series presented here.

Another appearance resembling prolapse defects is that of pyloric hypertrophy, as described by Kirklin and Harris[8] in 1934. Here the bulb is deeply cupped in the base, but the pylorus and the prepyloric area are long and narrow. Since Rees[11] has contended that pyloric hypertrophy is essential for the development of mucosal prolapse, and since only five cases of prolapse were known when Kirklin and Harris[8] described the characteristics of pyloric hypertrophy, the two conditions may be too closely allied to attempt differentiation.



Fig. 23. A very poor X-ray demonstration of prolapsed mucosa. Defects such as this have been rejected from the series because of insufficient evidence. However this case was confirmed by operation. Found in 1952, it is not included in the current series, which goes only through 1951.

Differential Diagnosis

It has been said that it is impossible to distinguish a polyp from a prolapsed mucosa, and that all cases

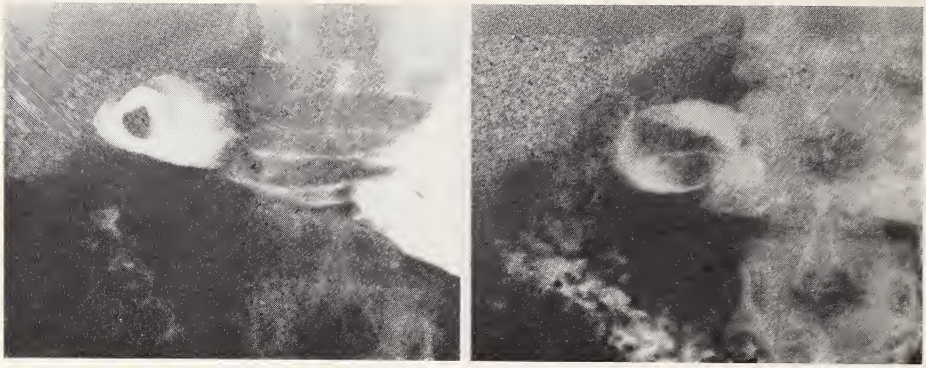


Fig. 24. Differential diagnosis: A bleeding duodenal polyp arising from the glands of Brunner, previously reported by Johnson and Dorough[38]. Note the sharp outline.

should be explored for that reason. The size of this series is the best answer to that. No one in his right mind is going to advise operation on 117 patients because of this possibility. The danger does exist, but I believe it has been exaggerated. In most instances the defect produced by a polyp or other tumor is sharper and more radiolucent than that of a prolapse. Two cases which illustrate this point are shown. in Fig. 24 and Fig. 25.

Purpose of This Study

My one purpose in this presentation is to dispel, if I can, some of the confusion and disagreement which now exist in regard to mucosal prolapse. It is hoped that this report will make some contribution toward answering three basic questions about prolapsing mucosa: (1) How frequent is it? (2) How important is it? and (3) What should be done about it?

A series of this size should have some statistical value, and there should be some advantage in the fact that the techniques used and the treatments prescribed were uniform throughout the study. Differences in interpretation will not be a problem here as they might in a series of collected cases.

Table 2 shows some of the figures resulting from this review. During 1949, 1950, and 1951 there were 1,593 x-ray examinations of the stomach and duodenum. Of this number 117 cases of prolapsing gastric mucosa were found; an incidence of 7.3 per cent. Other reports have been considerably lower, except for Ferguson [30] who quoted an incidence of 7.7 per cent in the x-ray departments of Grady Memorial Hospital and Emory University Hospital. It is probably natural that the incidence of this condition should be higher in a gastroenterological practice than in the radiology department of a general hospital, or in the files of a full-time radiologist. We can see the effect of a natural screening process in operation here. Many of the well-known ailments such as peptic ulcer never reach the gastroenterologist because they are treated and relieved by their regular physicians, while the less common disorders often reach him by a process of gravitation.

TABLE 2

Prolapsing Gastric Mucosa

Review of 117 Cases

Incidence (in 1953 examination)		7.3%
Males	79	67.5%
Females	38	32.5%
Oldest male	81 years	
Oldest female	84 years	
Youngest male	21 years	
Youngest female	18 years	
Shortest duration	24 hours	
Longest duration	33 years	



Fig. 25. Differential diagnosis: A submucous lipoma, unattached, moving back and forth through the pylorus. Note the sharp outline. The radiolucent spots in the antrum are artifacts. The lipoma was removed by Dr. Ben. H. Clifton.

Table 3 shows some of the other diagnoses made on these patients. They will be important later in evaluation of the response to treatment.

TABLE 3

PROLAPSING GASTRIC MUCOSA

Other diagnoses in these patients

Carcinoma of esophagus	1
Esophageal diverticulum	1
Esophageal ulcer	1
Hiatus hernia	3
Diabetes mellitus	2
Carcinoma of uterus	1
Gallstones	2
Duodenal ulcer	20
Gastric ulcer	1
Diverticulosis of colon	5
Diverticulosis of duodenum	8
Lymphoid leukemia	1
Endometrioma of umbilicus	1

A tabulation of symptoms is shown in Table 4. Attention is called to the relatively small number (26.5 per cent) reporting food relief. This is to be expected, and gives us one lead which may have some suggestive weight in differential diagnosis between duodenal ulcer and prolapsed mucosa. It is suggestive only, because all duodenal ulcers do not experience food relief, and some prolapse cases do. Eighty-six cases, or 73.5 per cent, were made worse by food. Antacid relief was not common, appearing in only 19.6 per cent.

It must be kept in mind that symptoms referable to the upper gastrointestinal tract are usually limited to a few standard complaints that appear singly or in various combinations. It would be unreasonable to expect prolapsing gastric mucosa to furnish us with any unique symptom. Any subjective effects it produces would be those referable to the pyloroduodenal area, namely, fullness, pain, nausea, vomiting, gas, and belching. In order of frequency, these were: gas, 78.6 per cent, pain, 76.1 per cent, fullness, 61.5 per cent, belching, 59 per cent, burning, 47.8 per cent, nausea, 42.7 per cent, and vomiting, 29.9 per cent. Nervousness was reported by 70.1 per cent.

TABLE 4

PROLAPSING GASTRIC MUCOSA

Subjective Findings in 117 Cases

Gas	92	78.6%
Pain	89	76.1%
Fullness	72	61.5%
Belching	69	59.0%
Burning	56	47.8%
Nausea	50	42.7%
Vomiting	35	29.9%
Nervousness	82	70.1%
Food relief	31	26.5%
Worse after food	86	73.5%
Antacid relief	23	19.6%

The objective findings are shown in Table 5. Gastric analysis was not done on five cases because of various contra-indications, such as an esophageal ulcer, or refusal on the part of the patient. Achlorhydria to an Ewald meal was found in 15.4 per cent. Most authors have contended that there is no characteristic symptom complex associated with this condition, and certainly the symptoms listed above are not definitive. It was decided to check a like number of case histories from this same period for similar symptoms as a crude comparison. Accordingly, 117 consecutive cases from the 1950 files were reviewed without any selection except that they did not have a diagnosis of prolapsed mucosa. The comparative figures appear in Table 6. One objective finding has been included, that of achlorhydria. The similarity of the figures in both groups is striking. The only sharp difference is in the achlorhydria figures, with a predominance of two to one in the prolapse group. If this has any significance it has not yet been demonstrated.

TABLE 5

PROLAPSING GASTRIC MUCOSA

Objective Findings in 117 Cases

Achlorhydria	18	15.4%
(No analysis on 5 cases)		
High free HCl		100.0
Low free HCl		14.0
Average free HCl		48.3
High RBC		6,690,000
Low RBC		3,300,000
Average RBC		4,929,000
High hemoglobin	(120%)	17.4 Gm.
Low hemoglobin	(68%)	9.6 Gm.
Average hemoglobin	(96%)	13.9 Gm.

TABLE 6

PROLAPSING GASTRIC MUCOSA

Comparison of findings with those in 117 cases without prolapsing mucosa

	Prolapse Group	Non-Prolapse Group
Fullness	61.5%	55.5%
Gas	78.6%	71.0%
Burning	47.8%	49.6%
Nausea	42.7%	53.8%
Vomiting	29.9%	28.2%
Pain	76.1%	73.5%
Made worse by food	73.5%	41.0%
Achlorhydria	15.4%	7.7%
Nervousness	70.1%	73.5%

IS THERE A SYMPTOM PATTERN?

The contention that there is no recognizable symptom complex is supported by these comparative figures. On paper there definitely is not. Yet there is one characteristic feature that must be mentioned, and it does not show in a tabulation of this sort. That is the periodicity of the attacks, which has been commented on by most of the authors. This periodicity is so characteristic, and the attacks are often so unexplainable, that it has enabled me on several occasions to suspect, and later confirm, the presence of a prolapse. To illustrate this point more impressively, I can tell of more than one instance in which a review of an old history has suddenly led to a suspicion that here was a prolapse which I had failed to recognize. I had this experience with Case 3. When she told me how she enjoyed an ocean voyage without a moment's seasickness, but was seized with a violent attack of nausea and vomiting as she walked down the gangplank, and was unable to retain food for a week after she landed, I thought I recognized the pattern. I sent for her films—made several years earlier—and there it was. So there must be a pattern, after all, at least in some cases. It is characterized chiefly by the suddenness of the

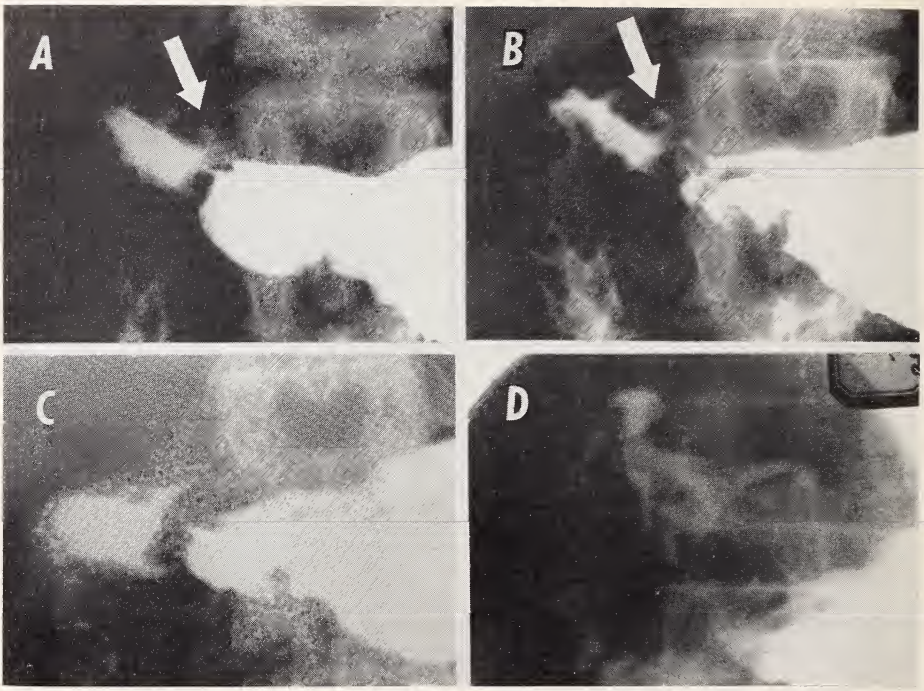


Fig. 26. (A) and (B) Two views from Case 45 showing the duodenal ulcer which was recognized and treated by the author. (C) and (D) Two views showing the mucosal prolapse which was overlooked on a re-check examination one month later. Two years later recurring symptoms led to a subtotal gastric resection by Dr. Wm. Perrin Nicolson, Jr. This operation confirmed the prolapse and showed a healed ulcer scar. In the meantime three X-ray studies elsewhere showed neither ulcer nor prolapse. In spite of these negative reports Dr. W. C. Waters made a diagnosis of prolapsing mucosa on clinical evidence alone.

attacks and by the intervals of relief, often complete as long as it lasts. Archer and Cooper[14] reported a case in which the diagnosis was made before operation, but was not confirmed by x-ray studies. It was then confirmed by surgery.

Case 45 illustrates not only this point, but several others as well. This patient had a duodenal ulcer (Fig. 26, A and B) which I recognized and treated with satisfying results, but he also had a prolapsed mucosa which I overlooked. It was discovered two years later when the films were reviewed for this series. (Fig. 26, C and D). This additional diagnosis was immediately reported to the referring physician, who said the patient had, in the meantime, had three x-ray examinations because of recurring symptoms. Though none of the three examiners had found either ulcer or prolapse, one of them was convinced that a prolapse existed, and the patient was scheduled for operation because of his persistent pain. We promptly reviewed, together, the original films and those made later, with unanimous agreement as to the original ulcer diagnosis, the prolapse which had been missed, and the complete absence of both findings on subsequent films. The operation showed a completely healed ulcer scar and a definite mucosal prolapse (Fig. 22).

It will be profitable to dwell on several points before leaving this case. (1) One internist was able to make a diagnosis of mucosal prolapse on the basis of symptoms alone, and to persist in this diagnosis in the face of three negative x-ray reports. (2) The healing of the duodenal ulcer—which was confirmed by the operation—did not provide permanent symptomatic relief. The mucosal prolapse was definitely causing the symptoms, even though it could not be demonstrated. (3) The films which established the diagnosis were made two years before the operation, while recent films failed to show it. This effectively answers those who feel that they can "rule out" a prolapse simply by producing negative x-ray films, or who say that a prolapse has "gone away" because it is no longer found. (4) It impressively demonstrates the value of reviewing old films for this condition, and the importance of reporting it when it is thus found.

It is well to review the findings, and especially the films, on any patient who continues to have unexplained upper abdominal symptoms, especially if they

have not responded to therapy for other ailments already diagnosed. And we should remember that the defects may not be present all the time. Not only may negative examinations be misleading, as just shown in Case 45, but there may be many normal pictures even at the time of good x-ray demonstration. In quite a few instances definite prolapse defects have been found on one or two films, with perfectly normal outlines on the others. It is necessary to make exposures in various positions, with and without compression. Anyone who attempts to economize on films will inevitably miss some of these diagnoses. In Case 69 of this series there was no suggestive evidence until the three-hour study was made (Fig. 4).

Clinical Importance Not Always Measured by X-ray Appearance

It is a mistake to suppose that the importance of the prolapse can be estimated from the size of the defect or the character of the defect. Some of the most impressive films, from the standpoint of good x-ray demonstration, are from cases having little or no trouble, while the worst case—Case 75, operated on solely for her prolapsed mucosa—had no suggestive films until the three-hour study. That showed a defect which was recognized as prolapse (Fig. 27), but it was not a particularly impressive defect. This patient was treated for some months before I began to wonder if the prolapse might explain her failure to respond to treatment. This case, with no suggestion whatever of prolapse on her first films, and only a very poor demonstration on her three-hour film, was operated on and proved to have a strangulated prolapsed mucosa and a hypertrophied pyloric muscle. A pyloroplasty gave complete relief. The redundant mucosa was not excised.

Table 7 shows the response to treatment. No attempt should be made to evaluate these figures without referring again to Table 3, for in many of these cases we have no right to assume that the prolapse was the only cause of symptoms—for example, the 20 cases with duodenal ulcer. In several cases the other findings were of such gravity that the prolapse had no significance. The nine unrelieved cases include the two with carcinomas and the one with an esophageal ulcer. Of the six remaining, four have been relieved by operation. One who had an operation for gallstones got no relief from his operation, but continues to have mild constant nausea ascribed to his very pronounced prolapse. It was discovered by a review of his old films after he had failed to be relieved by the cholecystectomy.

TABLE 7

Prolapsing Gastric Mucosa

Response to Treatment

Good; no recurrence	80	(68.5%)
Good; occasional recurrence	5	(4.3%)
Fair	12	10.8%)
Poor	3	(2.5%)
No relief	9	(7.7%)
Stopped treatment	3	(2.5%)
No report	4	(3.4%)
No symptoms at start	1	(0.8%)

One of the nine unrelieved cases was relieved by pyloroplasty. Three were relieved by subtotal gastrectomy for other causes. Two refused operation. One has agreed. Two have only trivial symptoms.

Treatment

The medical treatment of this condition is one point on which all authors have agreed. It is essentially that for duodenal ulcer. My own cases have received antispasmodics, sedation as indicated, antacids when hyperchlorhydria is present, and an appropriate diet. For the more severe cases this is as strict as for a duodenal ulcer. Cases with achlorhydria have received dilute hydrochloric acid when their symptoms subsided, but some of them did not tolerate it.

The surgical treatment is less readily agreed on. Appleby[24], in 1947, advised a subtotal gastroctomy. Most of the early authors recommended excision of the redundant mucosa and some type of pyloroplasty. More recently the excision of the mucosa has been frowned on as a possible source of future ulceration or circular scarring, and the pyloroplasty alone seems quite adequate. It must be emphasized that this applies to mucosal prolapse alone. If there are other factors which in themselves would require more radi-



Fig. 27. (A) and (B) Two views showing the normal outlines of stomach and duodenum in Case 75. (C) The 3-hour film, showing a very faint central defect in the base of the cap. This picture is purposely over-exposed to bring out the defect. At operation the prolapsed membrane was found to be incarcerated and could not be drawn back into the stomach. A Heinecke-Miculicz pyloroplasty by Dr. J. D. Martin, Jr., gave complete relief.

cal surgery, then the prolapse itself should really have no bearing on the choice of operation.

Case 110, for example, had an extensive hemorrhagic gastritis (Fig. 21) and had been bleeding steadily for at least two months before his operation. He also had a complete achlorhydria. The prolapse in this case had no bearing on the choice of operation, which was a subtotal gastrectomy.

Mechanism of Symptom Production

In what way does a prolapsing mucosa cause symptoms? The pyloroduodenal area is an acknowledged source of many upper abdominal symptoms. Any condition which results in spasm of the pyloric muscle, or occlusion of the pyloric channel, may be expected to produce pain, fullness, nausea or vomiting, or all of these together. Unless it causes such spasm or such occlusion, however, I doubt if simple extrusion of the redundant mucosa is a frequent cause of these symptoms. In this series the gastric emptying rate was practically always within normal limits. Most of these stomachs were empty in approximately three hours. Only five cases showed six-hour retention, in sharp contrast to the opinion expressed by Pendergrass[5]. Therefore pyloric obstruction is not a prominent feature of prolapsed mucosa. As for the spasm, it should be noted that many of these cases showed normal films one moment and prolapses the next. Does this mean that the redundant mucosa slips freely in and out, or does it merely mean that some of the films simply failed to show it? Either way, most of these patients were not having any great discomfort from their barium meals when their prolapses were successfully demonstrated.

Asymptomatic Prolapse

Case 28 had no gastrointestinal symptoms at all, but reported an alarming loss of weight. Because of this she received a thorough examination in a search for malignancy, and a prolapsed mucosa was found. This proves that it can definitely be asymptomatic. Another asymptomatic case has been found in 1952.

Isolated instances like this do not indicate that prolapsing mucosa is harmless, any more than a "silent" gallstone indicates that gallstones are harmless. But they do cause us to speculate on the mechanism of symptom production. Did Case 3 suddenly become nauseated because her redundant mucosa suddenly slipped into the duodenum, or did an already-existing extrusion suddenly become edematous? I feel that the answer to this question will go a long way toward reconciling some of the differing viewpoints which now cause confusion.

One thing is quite clear. We must judge each case on its own merits, and though that sounds trite, it appears we must learn it over and over again. Radical measures should not be considered for this condition until all possible efforts have been made to relieve the symptoms some other way. If no other cause can be found, and if the symptoms are distressing or disabling, then and only then should an operation be considered. This was the procedure followed in Case 75, and the end result has been most gratifying to doctors and patient. I should like to remind you here that the other cases which were confirmed surgically were operated on for other reasons, and those reasons were no less valid because the patients happened to have a prolapse also. This new diagnosis should never blind us to the fundamentals on which other surgical decisions are made.

Significance of Findings

Several conclusions are readily apparent from this review. The fact that 117 cases can be found in one practice, even over a three year period, indicates that the "rarity" of this condition is an illusion. The fact that most of these cases got adequate relief on simple medication and diet indicates that it is usually an easily-controlled problem, and that the practice of reporting only the newsworthy cases has created a false impression, not only as to its frequency, but as to its gravity as well. The fact that occasional cases can be recognized from their histories—at least tentatively—shows that there is some semblance of a pattern which is growing more familiar. The fact that one uncomplicated case received complete and unqualified symptomatic relief following a pyloroplasty shows that prolapse alone can cause symptoms of utmost distress. The fact that another patient has continued to have nausea without any relief, following removal of a large duodenal diverticulum and a gallbladder filled with stones, shows that an unrecognized prolapse can cause trouble even after removal of gallstones. The fact that one patient, who was examined because of excessive weight loss, had no gastrointestinal symptoms shows that prolapse can exist without symptoms, and suggests that it is not necessarily the prolapse itself, but some effect it produces, that causes the trouble. The fact that only one of these patients required surgery for mucosal prolapse alone indicates that this diagnosis by itself should have little or no effect on the patient's insurability. In this connection, it is urgent that more of us report mild and asymptomatic cases, in order to get the true picture.

In making this study I have tried to be completely impartial. Regardless of what view one might hold concerning mucosal prolapse, he could find support for it in isolated cases in this series. The simple truth is that some cases of mucosal prolapse are very serious indeed. Some are not serious at all. There is no point in trying to force them all into one category. If we can learn what sets the one group apart from the other we will have made great progress.

Summary

1. Prolapse of the gastric mucosa through the pylorus is a fairly common condition.

2. Its recognition often explains symptoms hitherto unexplained, and may result in the rehabilitation of the patient.

3. In some instances it alone produces symptoms of sufficient magnitude to justify surgery.

4. In most instances it can be relieved by medical treatment.

5. It is often associated with duodenal ulcer, and the prolapsed membrane itself may ulcerate.

6. It has been the cause of massive hemorrhage.

7. There is no evidence at present that it predisposes toward malignant change. Only one such case has so far been reported[16].

8. There is no evidence that the patient with this condition, uncomplicated, is in any way a bad insurance risk.

9. Conservative treatment, similar to that for duodenal ulcer, should be tried as long as possible before resorting to surgery. Patients who can wait should be advised to do so, in the hope that accumulation of more information may lead to greater assurance as to the proper decision.

10. If unavoidable, surgery for mucosal prolapse alone should probably be limited to some form of pyloroplasty. If other conditions call for subtotal resection, then they, and not the prolapse, should dictate the choice of operation.

CASE REPORTS

Case No.	*Sex*	*Age*	*Symptoms*	*Duration*	*Food Relief*	*Antacid Relief*	*Made Worse by Food*	*Gastric Analysis*	*Blood in Stools*	*Comments; Other Conditions Found, If Any*	*Response to Treatment*
1	M	59	Epigastric and midsternal pain, nervousness	20 years	No	No	Yes	40-60	No	Antral gastritis Diverticulosis of colon	Good
2	M	61	Occasional generalized abdominal pain	Several weeks	No	No	No	66-80	Yes	Extreme colitis; tiny postoperative colon fistula	Good
3	F	37	Epigastric pain, nausea, vomiting, nervousness	8 years	No	No	No	26-50	No		Good
4	M	25	Chest pain, fullness. gas, nausea, vomiting	Several months	No	No	No	20-42	No		Good
5	M	52	Fullness, gas, burning	2 weeks	No	No	Yes	0-5	Yes	Antral gastritis Irritable duodenum	Good
6	F	59	Epigastric pain, gas, nausea, nervousness	Several years	Yes	No	No	34-60	Yes	Lymphoid leukemia, duodenal ulcer, extreme colitis	No report
7	M	28	Epigastric pain, gas, nausea, nervousness	7 years	Yes	No	No	64-82	Yes		Good
8	M	47	Epigastric pain	8 years	Yes	Yes	No	54-78	No	Duodenal ulcer	Good
9	M	22	Generalized abdominal pain, fullness, burning, belching, nervousness	3 months	Yes	Yes	No	88-104	Yes	Duodenal ulcer	Good
10	M	37	Shortness of breath after meals; fullness, belching, burning; occas. vomiting	1 year	Yes	Yes	Dyspnea only	Not done	No		Good
11	F	18	Chest pain, umbilical pain, nausea, vomiting, fullness, gas, belching	5 months	No	Yes	Yes	36-68	No	Duodenal ulcer	Good
12	F	62	Pain in gallbladder area (g.b. out)	Several months	No	No	No	60-82	No		Poor
13	M	60	Fullness	2 months	No	No	No	56-76	No	Ventral hernia	Good
14	F	65	Pulling sensation in R.U.Q., regurgitation of food without nausea, fullness, gas, belching	3 months	No	No	No	20-42	No	Diabetes mellitus	Good
15	M	51	Gnawing epigastric ache, occas. nausea, fullness, gas, shortness of breath, nervousness	1 year	Yes	No	No	0-10	Yes	History of rectal cancer with operation. Under treatment elsewhere for pernicious anemia	Good
16	F	42	Epigastric pain, gas, fullness, nausea, vomiting, nervousness	1 year	No	No	No	0-14	No	Had gallstones, so g.b. was removed. Still needs treatment	Good
17	F	41	Violent attacks of pain, nausea, vomiting, gas, fullness, belching, nervousness. diarrhea	2 months	No	No	No	0-8	No	Numerous violent allergies. Extremely irritable colon	No relief
18	M	52	Chest pain, epigastric pain, shortness of breath, fullness, gas, nervousness	16 years	No	Yes	No	50-76	No	Regional ileitis Diverticulosis of distal colon	Good
19	M	39	Pain in chest, fullness, belching, gas shortness of breath, nervousness	12 years	No	No	No	38-64	No	B.M.R.—27. Had extreme hypermotility with barium in rectum at 3 hours	Fair
20	M	49	Epigastric pain, gas, fullness, belching nervousness	1 year	Yes	Yes	No	20-38	No	Gastric diverticulum duodenal diverticulum	Good

Case No.	Sex	Age	Symptoms	Duration	Food Relief	Antacid Relief	Made Worse by Food	Gastric Analysis	Blood in Stools	Comments; Other Conditions Found, If Any	Response to Treatment
21	M	51	Pain in L.U.Q., gas, fullness, belching, nausea, shortness of breath, burning	10 days	Yes	No	No	66-90	No	Diabetes mellitus Antral gastritis	Good
22	M	46	Nausea, vomiting, nervousness, headache	1 year	No	No	Yes	50-68	No		Good
23	F	50	Mid-sternal pain, epigastric pain, gas, belching, fullness, shortness of breath	2 years	Yes	No	No	0-	No		No relief
24	M	34	Gnawing epigastric pain, vomiting without nausea, fullness, gas, belching, burning, nervous	4 years	No	No	No	46-60	No	Antral gastritis	Good
25	M	42	Severe epigastric pain, gas, burning, nervousness	7 years	Occas.	Yes	Yes	64-92	No	Duodenal ulcer	Good
26	M	44	Dull epigastric pain, fullness, gas nervousness	6 weeks	No	No	No	34-47	No	Antral gastritis, Pyloroduodenal irritation	Good
27	M	29	Epigastric pain, gas, fullness, burning, nausea, vomiting	8 months	No	No	No	28-70	No		Good
28	F	40	Loss of weight (17 lbs.), nervousness	6 months	No	No	No	44-52	No	Endometrioma of umbilicus and underlying peritoneum	No symptoms to relieve
29	M	50	Pain in left chest, shortness of breath, nervousness, gas, belching	6 years	No	No	No	68-88	No	Duodenal ulcer	Good
30	M	37	Epigastric pain running up to throat, fullness, gas, burning, belching	4 years	No	No	Yes	74-100	No	Pyloro-duodenal irritation, irritable colon	Fair
31	F	23	Spells of nausea and vomiting, belching, nervousness, frequent mild hematemesis	3 years	No	No	No	18-38	Yes		Good
32	M	57	Pain in epigastrium and gallbladder area, burning (the chief complaint) food "boils up" in throat	8 years	Occas.	No	No	44-68	No	Large pyloric ulcer	Good
33	M	59	Epigastric pain, chest pain, nervousness, shortness of breath	17 years	No	No	No	40-52	No	Old duodenal ulcer with scarring	No relief
34	F	53	Occas. epigastric pain, fullness, gas, belching, burning, nervousness	20 years	No	No	No		Yes	Duodenal diverticulum	Good
35	M	41	Dull pain in right hypochondrium, gas, nervousness, shortness of breath	4 months	No	No	No	52-74	No	Ileitis, irritable colon	Fair
36	F	62	Epigastric pain, nervousness	13 years	No	No	No	44-74	No	Visceroptosis. Had 6-hour retention	Good
37	F	45	Fullness, belching, gas, burning, nervousness	3 months	No	No	No	28-50	No	Carcinoma of uterus	No relief; Died with carcinomatosis
38	M	34	Acute spells of epigastric pain, followed by fullness, nausea, and vomiting	2 years	No	No	No	52-68	Yes	Antral gastritis, gallstones	Good
39	M	53	Hematemesis	1 day	No	No	No	83-94	Yes	Duodenal diverticulum	Good
40	M	65	Gas, burning, nervousness, diarrhea	15 years	Yes	No	No	78-92	Yes	Hiatus hernia, antral gastritis	Good
41	M	56	Belching, gas, shortness of breath, nervousness, diarrhea	6 years	No	No	No	76-100	Yes	Pyloroduodenal irritation	Good
42	M	55	Epigastric pain, gas, fullness, belching, burning, nausea, vomiting, nervousness	5 years	No	No	No	56-76	No	Antral gastritis, migraine	Poor
43	M	38	Epigastric pain, burning, nervousness; diarrhea at onset of each attack	4 years	No	No	Yes	80-96	No	Antral gastritis, irritable colon	Good
44	M	55	Epigastric pain, gas, fullness, belching, nervousness	25 years	No	No	No		No		No relief

Case No.	Sex	Age	Symptoms	Duration	Food Relief	Antacid Relief	Made Worse by Food	Gastric Analysis	Blood in Stools	Comments; Other Conditions Found, If Any	Response to Treatment
45	M	51	Intermittent epigastric pain, gas, belching. Can produce pain in 45 seconds by lying on right side. Attacks may last a month; may go 3 months without pain.	10 years	No	Yes	No	64-72	No	Duodenal ulcer Antral gastritis	Ulcer healed Operation 2 years later for pain due to prolapse
46	M	65	Nausea, vomiting, gas, belching, burning, choking, shortness of breath, nervousness	1 year	No	Yes	No		No	Hiatus hernia Antral gastritis	Fair
47	F	41	Burning, fullness, gas, belching	5 years	No	No	Yes	0-7	No		Good
48	M	81	Intermittent epigastric discomfort, gas	33 years	No	No	No	0-6	No	Hypertension	Good
40	F	37	Low abdominal pain, nausea, vomiting, gas, fullness, burning, nervousness	7 years	Yes	Yes	No	22-42	No		Good
50	M	42	Dull epigastric pain, midsternal burning, nausea, fullness, gas, belching	18 mos.	Yes	No	Yes	60-76	No	Old duodenal ulcer with scarring	Good, but occasional recurrence
51	M	63	Gas, belching, nervousness, shortness of breath	15 years	No	No	No	0-10	Yes	Oral sepsis	Good
52	M	40	Nausea, low abdominal pain, fullness, gas, shortness of *b*reath, nervousness	5 years	No	No	No	40-56	Yes	Antral gastritis Diverticulosis of distal colon	Good
53	M	68	Epigastric pain, gas, belching, fullness, nervousness	3 years	No	No	Yes	15-60	No	Antral gastritis Colitis	Good
54	M	35	Epigastric pain, gas, belching, fullness, burning, nervousness	1 week	No	No	Yes	44-72	Yes	Duodenal ulcer Irritable colon	Good
55	F	31	Epigastric pain, fullness, nervousness	6 months	No	No	No	60-82	No	Pyloric ulcer	Good
56	M	28	Epigastric pain, gas, nausea, vomiting, fullness, belching, nervousness	10 years	Yes	Yes	No	44-60	No	Oral sepsis, Hookworm infestation, Pyloroduodenal irritation	Poor
57	F	53	Intermittent epigastric pain, nausea, vomiting, fullness, gas, burning, shortness of breath, nervousness	10 years	No	Yes	Yes	48-76	No	Large non-opaque gallstone (operation advised but refused)	Good except nerves
58	M	46	Almost continual dull epigastric pain, fullness, gas, belching	6 years	No	Yes	No	0-2	No	Pyloro-duodenal irritation. Small intestine hypermotility	Good
59	M	45	Nausea, vomiting, gas, burning, nervousness	30 years	No	No	No	72-96	No	Pyloro-duodenal irritation	Good
60	F	28	Epigastric pain, gas, belching, fullness, burning, nervousness	2 years	Yes	No	No	14-32	No	Pyloro-duodenal irritation	Good
61	M	42	Epigastric pain, gas, fullness, burning	5 years	Yes	Yes	No	72-92	Yes	Duodenal ulcer beyond the cap	Good
62	M	59	Intermittent epigastric pain, nausea, vomiting, burning, gas, nervousness	10 years	No	Yes	No	62-82	Yes	Large duodenal ulcer Epididymitis	Good
63	M	30	Fullness and gas	1 week	No	No	No	100-116	No	Hyperchlorhydria	Good
64	F	44	Epigastric pain ,gas, nausea, fullness, belching, shortness of breath, nervousness	5 years	Yes	Yes	No	55-69	Yes	Duodenal ulcer	Good
65	M	45	Epigastric pain, gas, vomiting without nausea, fullness, belching, burning, shortness of breath, nervousness	7 years	No	No	Yes	0-	Yes	History of operation for small intestinal obstruction in 1945	Fair
66	M	52	Epigastric pain, gas, belching, burning, nervousness	17 years	Yes	Yes	No	34-62	No	Antral gastritis	Good
67	M	63	Epigastric pain, gas, shortness of breath, fullness, nervousness	4 months	No	No	No	70-84	No	Antral gastritis	Good

Case No.	Sex	Age	Symptoms	Duration	Food Relief	Antacid Relief	Made Worse by Food	Gastric Analysis	Blood in Stools	Comments; Other Conditions Found, If Any	Response to Treatment
68	M	53	Epigastric pain, gas, nausea	3 years	Yes	Yes	No	64-82	No	Antral gastritis with malignancy considered probable. Operation advised after surgical consultation; refused	Good, but antrum looks as bad as ever after two years
69	F	53	Intermittent epigastric pain, nausea, vomiting, diarrhea, fullness, belching, gas, burning, shortness of breath, nervousness	25 years	Yes	No	No	0-16	No	Pernicious anemia. Many allergies	Good, but occasional recurrence
70	M	72	Nausea, gas, shortness of breath	3 years	Yes	No	No	40-56	No	Gallstones, Large duodenal diverticulum on upper aspect beyond cap. This and G.B. removed without relief.	No relief
71	M	21	Dull epigastric pain, fullness, bleching, shortness of breath, choking, nervousness	2 years	No	No	Yes	46-68	No	Antral gastritis Oral sepsis	Did not return; no report
72	M	49	Nausea, vomiting, choking, nervousness	5 years	No	No	Yes	62-82	No	Pyloro-duodenal irritation, oral sepsis	Good
73	M	40	Epigastric pain, chest pain, nausea, vomiting, fullness, nervousness	3 years	No	Yes	Yes	38-52	No	Duodenal ulcer in cap Duodenitis beyond cap Antral gastritis	Good, but stopped treatment
74	M	46	Epigastric pain, gas, fullness, belching, nervousness	15 years	No	Yes	No	50-62	No	Duodenal ulcer 6-hour gastric residue	Good
75	F	27	Epigastric pain, nausea, vomiting, fullness, burning, nervousness	1 year	Yes	No	No	34-60	No	Prolapsed membrane was strangulated. After operation all symptoms relieved except nervousness	No relief until operation
76	M	57	Diarrhea, epigastric pain (only with the diarrhea), shortness of breath, gas, nervousness	6 years	No	No	No	0-16	Yes	Anal fissure Proctitis	Good
77	M	44	Intermittent epigastric pain, fullness, burning, nervousness	2 years	No	No	No	26-58	No	Antral gastritis	Good
78	M	50	Fullness, belching, gas, burning; rare nausea and vomiting; shortness of breath, nervousness	12 years	No	Yes	Yes	38-52	No	Pyloro-duodenal irritation Irritable colon	Good
79	M	65	Epigastric pain, gas, nausea, vomiting, fullness, belching, shortness of breath, nervousness	20 years	No	Yes	No	84-104	No	Duodenal ulcer with scarring, Milk allergy Antral gastritis	Good
80	M	62	Epigastric pain, gas, belching, shortness of breath	20 years	Yes	Yes	No	44-60	Yes	Duodenal ulcer Colitis	Good
81	F	67	Mid-sternal pain, gas, fullness, belching, burning, shortness of breath, nervousness	4 years	No	No	No	55-76	No	Duodenal diverticulum 6-hour gastric residue	Good
82	M	50	Fullness, burning, belching, shortness of breath, nervousness	3 months	No	Yes	Yes	84-100	No	Duodenal spasm 6-hour gastric residue	Did not return; no report
83	M	33	Epigastric pain, gas, nausea, vomiting, fullness, belching, nervousness	3 years	No	No	No	36-62	No	Probable duodenal ulcer, not confirmed	Stopped treatment; was an alcoholic
84	F	38	Hematemesis, gas, fullness, belching	5 days	No	No	No	36-54	No	Antral gastritis Duodenitis Fibroid uterus	Good
85	M	56	Epigastric pain, gas, fullness, belching	2 months	No	No	No	0-6	No	Carcinoma of esophagus	No relief; Palliative esophagectomy; died in 5 months
86	M	60	Belching, nervousness	2 years	No	No	No		No	Esophageal ulcer (confirmed by esophagoscopy) Diabetes mellitus	Fair

Case No.	Sex	Age	Symptoms	Duration	Food Relief	Antacid Relief	Made Worse by Food	Gastric Analysis	Blood in Stools	Comments; Other Conditions Found, If Any	Response to Treatment
87	F	62	Vomiting without nausea, chest pain, gas, fullness, belching, burning, nervousness, shortness of breath	15 years	No	No	No	42-68	No		Fair
88	M	48	Generalized abdominal pain, fullness, gas, belching, nervousness	2 years	No	No	Yes	40-68	No	Pyloro-duodenal irritation Prostatic hypertrophy	Good, but has recurrences
89	M	69	Epigastric pain, gas, fullness, belching, burning, shortness of breath, nervousness	4 months	No	No	Yes	22-42	Yes	Extreme duodenal spasm, 6-hour gastric residue	Did not return; no report
90	F	45	Epigastric pain, gas, fullness, belching, burning, nausea (no vomiting) shortness of breath, nervousness	16 years	No	No	No	6-26	No	Duodenal diverticulum B.M.R. minus 23. Endocrine disorders being treated by endocrinologist	Fair
91	F	69	Pain in left scapular area, belching, gas, burning, very nervous	4 years	No	No	No		No	History of radical mastectomy for carcinoma, 6-hour gastric residue	Good
92	F	52	Epigastric pain, gas, nausea, fullness	8 months	No	No	No	32-52	No	Diverticulosis of colon	Good
93	F	36	Epigastric pain, gas, fullness, nausea, vomiting, burning	6 years	No	No	No	38-66	No	Antral gastritis Extreme colon spasm Anal cryptitis	Good
94	F	56	Gas pains, belching, burning, nausea, nervousness	12 years	No	No	No	50-66	No	Pyloro-duodenal irritation Redundant sigmoid colon	Fair
95	M	44	Tarry stools, nervousness	1 year	No	No	No	60-94	Yes	History of perforated duodenal ulcer 1 year earlier, without previous symptoms	Good
96	M	37	Intermittent attacks of constant epigastric pain and gas	10 years	Yes	No	No	44-62	No	Pyloro-duodenal irritation	Good
97	F	64	Epigastric pain, choking, burning, nausea	12 years	Yes	Yes	No	46-68	No	Esophageal diverticulum Hypertension Hemorrhoids	Good
98	F	36	Epigastric pain, gas, nausea, choking, shortness of breath, nervousness	10 years	No	No	No	52-72	No	Pyloro-duodenal irritation	Good, but symptoms recur at times
99	M	27	Epigastric pain, gas, fullness, belching, burning, nausea, vomiting	3 years	Yes	No	No	40-50	No	Duodenitis; probable ulcer, not confirmed	Good, but stopped treatment
100	F	84	Diarrhea (the chief complaint), blood in stools	3 months	No	No	No		Yes	Antral gastritis Duodenal diverticulum, Colitis (purulent discharge) Hypertension	Good
101	M	36	Pain in right lower quadrant, belching, gas, diarrhea	2 months	No	No	No	18-46	No	Gastric ulcer Adhesions in RLQ, postoperative	Good
102	F	68	Epigastric pain, gas, nausea (could never vomit), fullness, belching, burning, shortness of breath	All her life	No	No	No	16-30	No	Diverticulosis of colon	Good
103	F	63	Umbilical pain, gas, fullness, belching, burning, nausea, nervousness	5 years	No	No	No		Yes	Para-esophageal hernia Duodenal diverticulum	Fair
104	M	56	Epigastric pain, fullness, choking, nervousness	4 years	No	No	No	34-52	No	Antral spasm Irritable colon	Good, but has recurrences
105	F	40	Epigastric pain, gas, fullness, nervousness	1 month	Yes	No	No	42-68	No		Good
106	M	44	Acute pain in right hypochondrium, wtih attacks about every 2 weeks, nervousness	8 months	No	No	No	0-12	Yes	Fecaliths in appendix	Good
107	F	42	Spitting up (no real vomiting), belching of hot fluid; gas, fullness, burning, nervousness	15 years	No	No	No	12-22	Yes	Gastritis Hypertension	Good

Case No.	Sex	Age	Symptoms	Duration	Food Relief	Antacid Relief	Made Worse by Food	Gastric Analysis	Blood in Stools	Comments; Other Conditions Found, If Any	Response to Treatment
108	F	52	Pain in left lower quadrant, gas, nausea, shortness of breath, nervousness	4 years	No	No	No	18-38	Yes	Pyloro-duodenal irritation Diverticulosis of colon	Good
109	F	44	Dull epigastric pain, nausea, vomiting, gas, fullness, belching, shortness of breath, nervousness	2 months	No	No	No	36-56	Yes	History of appendectomy and cholecystectomy; probable adhesions	Poor
110	M	23	Epigastric pain, constant hematemesis and melena, nausea, vomiting, fullness, gas, belching, nervousness	1 year	Yes	No	No	0-	Yes	Hemorrhagic gastritis, very extensive	No relief until subtotal gastrectomy
111	M	65	Pain in mid-abdomen and back, fullness, gas, nervousness, shortness of breath	4 months	No	No	No		No	Duodenal ulcer	Good
112	M	63	Epigastric pain, nausea, vomiting, nervousness	30 years	No	No	No	50-70	No	Chronically diseased gallbladder removed 3 years earlier Arteriosclerosis	Fair
113	M	25	Epigastric pain, gas, nausea, fullness, belching	10 days	No	No	Yes	56-84	No	Antral gastritis Irritable colon	Good
114	M	63	Intermittent gas, fullness, belching, burning	1 year	No	No	No	44-52	No	Duodenal ulcer Antral gastritis which looked worse under observation; operation urged	Good (Symptomatic relief but X-rays grew worse)
115	M	30	Dull pain in right lower quadrant, gas, belching	2 weeks	No	No	No	28-52	No	Duodenal ulcer Antral spasm	Good
116	M	65	Epigastric pain, gas, belching, burning, nausea, shortness of breath, nervousness	7 months	No	No	Yes	0-8	No		Fair
117	M	26	Fullness; occasional gas, occasional belching	1 year	No	No	Yes	56-79	No		Good

BIBLIOGRAPHY

1. von Schmieden, F.: Die Differentialdiagnose zwischen Magengeschwur und Magenkrebs; die pathologische Anatomie dieser Erkrankungen in Beziehung zu ihrer Darstellung im Rontgenbilde, Arch. f. klin. Chir. 96:253-344, (Oct.) 1911.

2. Forssell, Gosta: Studies of the Mechanism of Movement of the Mucous Membrane of the Digestive Tract, Am. J. Roentgenol. 10:87-104, (Feb.) 1923.

3. Eliason, E. L., and Wright, V. W. Murray: Benign Tumors of the Stomach, Surg., Gyn. & Obst. 41: 461-472, (Oct.) 1925.

4. Eliason, E. L., Pendergrass, Eugene P., and Wright, V. W. Murray, The Roentgen-Ray Diagnosis of Pedunculated Growths and Gastric Mucosa Prolapsing Through the Pylorus; Review of the Literature. Am. J. Roentgenol. 15: 295-322, (April) 1926.

5. Pendergrass, Eugene P., Prolapse of Pedunculated Tumors and Gastric Mucosa Through the Pylorus into the Duodenum: Roentgenologic Diagnosis, J.A.M.A. 94:317-321, (Feb.) 1930.

6. Meyer, Karl A., and Singer, Harry A., Intermittent Gastric Ileus Due to Mechanical Causes, Surg., Gyn. & Obst. 53:742-749, (Dec.) 1931.

7. Shiflett, E. L., Tumors of the Duodenum and Hypertrophic Gastric Mucosa Prolapsing Through the Pyloric Canal Into the Duodenum, Radiology 19:79-90, (Aug.) 1932.

8. Kirklin, B. R., and Harris, Milo T., Hypertrophy of the Pyloric Muscle in Adults; a Distinctive Roentgenologic Sign, Am. J. Roentgenol. 29:437-442, (April) 1933.

9. Pendergrass, Eugene P., and Andrews, J. Robert, Prolapsing Lesions of the Gastric Mucosa, Am. J. Roentgenol. 34:337-350, (Sept.) 1935.

10. Meyer, W. H., quoted by Manning and Highsmith in summary of cases reported in literature to 1947.

11. Rees, C. E., Prolapse of the Gastric Mucosa Through the Pylorus; Surgical Treatment, Surg., Gyn. & Obst. 64: 689-694, (March) 1937.

12. Golden, Ross, Antral Gastritis and Spasm, J.A.M.A. 109: 1497-1500, (Nov.) 1937.

13. Bohrer, John V., and Copleman, Benjamin, Prolapsing Redundant Gastric Mucosa, Radiology 31: 220-222, (Aug.) 1938.

14. Archer, Vincent W., and Cooper, George, Jr., Prolapse of the Gastric Mucosa, Sou. Med. J. 32:252-256, (March) 1939.

15. Schindler, R., Necheles, H., and Gold, R. L., Surgical Gastritis; A Study on the Genesis of Gastritis Found in Resected Stomachs with Particular Reference to the So-Called "Antral Gastritis" Associated with Ulcer, Surg., Gyn. & Obst. 69:281-286, (Sept.) 1939.

16. Rubin, J. S., Prolapse of Polypoid Gastric Mucosa into the Duodenum, with Malignant Change, Radiology 38:362-364, (March) 1942.

17. Moersch, Herman J., and Weir, James F., Redundant Gastric Mucosa Simulating Carcinoma of the Stomach, Am. J. Digest. Dis. 9:287-289, (Sept.) 1942.

18. Bockus, Henry L., Gastroenterology, Vol. I, Page 762, W. B. Saunders Company, 1943.

19. Wolf, Stewart, and Wolff, Harold G., The Gastric Mucosa, Gastritis, and Ulcer, Am. J. Digest. Dis. 10:23-48, (Jan.) 1943.

20. Melamed, A., and Hiller, Robert I., Prolapsed Gastric Mucosa: Roentgenologic Demonstration of Ulcer Crater in Prolapsed Polypoid Mucosa, Am. J. Digest. Dis. 10:93-95, (March) 1943.

21. Norgore, Martin, and Shuler, Ivan J. D., Extrusion of Gastric Mucosa Through the Pylorus: Report on Two Patients Treated by Partial Gastrectomy, Surgery 18:452-457, (Oct.) 1945.

22. Scott, Wendell G., Radiographic Diagnosis of Prolapsed Redundant Mucosa into the Duodenum, with Remarks on the Clinical Significance and Treatment, Radiology 46:547-568, (June) 1946.

23. MacKenzie, W. C., MacLeod, J. W., and Bouchard,

J. L., Transpyloric Prolapse of Redundant Gastric Mucosal Folds, Canad. Med. J. 54:553-558, (June) 1946.

24. Appleby, L. H., Prolapsing Gastric Mucosa, J. Internat. Coll. Surgeons 10:135-141, (March-April) 1947.

25. Bralow, S. P., and Melamed, M., Prolapse of Redundant or Hypertrophied Gastric Mucosa, Am. J. Digest. Dis. 14:215-221, (July) 1947.

26. Wells, Josephine, Herniation of Gastric Mucosa into the Esophagus: Report of a Case, Am. J. Roentgenol. 58: 194-195, (Aug.) 1947.

27. Bralow, S. P., and Spellberg, M. A., Etiology of Prolapsed Gastric Mucosa; With an Illustrative Case Report. Am. J. Digest. Dis. 14:332-337, (Oct.) 1947.

28. Nygaard, K. K., and Lewitan, Alexander, Transpyloric Herniation of Redundant Gastric Mucosa, Am. J. Surg. 75:502-515, (March) 1948.

29. Manning, Isaac Hall, and Highsmith, G. P., Prolapse of the Gastric Mucosa Through the Pyloric Canal Into the Duodenum; Report of 16 Cases Diagnosed Roentgenologically, Gastroenterology 10:443-459, (April) 1948.

30. Ferguson, Ira A., Prolapse of the Gastric Mucosa; Report of Six Cases, Ann. Surg. 127:879-886, (May) 1948.

31. Zacho, Alfred, Relaxation of the Gastric Mucosa Producing Pyloric Obstruction, Arch. Surg. 57:45-50, (July) 1948. (Also reported in 1946, Nord. Med. 32:2334.)

32. Van Noate, H. F., Arnold, W. T., and Palmer, E. D., Clinical and Gastroscopic Observations on Prolapse of the Gastric Mucosa, Rev. Gastroenterol. 15:696-701, (Sept.) 1948.

33. Cove, Arthur M., and Curphey, Wilfred C., Prolapse of Redundant Gastric Mucosa, Surg., Gyn. & Obst. 88:108-114, (Jan.) 1949.

34. Hawley, Chapin, Meyer, Paul D., and Felson, Benjamin, The Roentgenologic Diagnosis of Prolapsed Gastric Mucosa, Am. J. Roentgenol. 61:784-796, (June) 1949.

35. Melamed, Myron, and Melamed, Abraham, Prolapsed Gastric Mucosa: A Possible Cause of "Gastric" Symptoms in Right Heart Failure, Ann. Int. Med. 31:245-259, (Aug.) 1949.

36. Ellison, A. B. C., and Squire, E. W., Prolapse into Duodenum, West Va. Med. J. 45:237-239, (Sept.) 1949.

37. Moon, A. E., Sr., and Speed, Terrell, Prolapse of the Gastric Mucosa Through the Pylorus: Presentation of a Case With Severe Hemorrhage, Sou. Med. J. 42:839-844, (Oct.) 1949.

38. Johnson, McClaren, and Dorough, Warren S., Bleeding Duodenal Polyp; Report of Case, Jour. Med. Assoc. of Ga. 38:542-543, (Dec.) 1949.

39. Manning, Isaac Hall, and Gunter, J. U., Prolapse of Redundant Gastric Mucosa Through the Pyloric Canal Into the Duodenum, Am. J. Path. 26:57-73, (Jan.) 1950.

40. Harris, F. C., and Byrne, E. T., Extrusion of Redundant Gastric Mucosa into the Duodenum, U. S. Armed Forces Med. 1:12:21, (Jan.) 1950.

41. Machella, Thomas E., in T. R. Harrison's Principles of Internal Medicine, Blakiston, 1950.

42. Bralow, S. P., Becker, G. H., Scheinberg, S., and Necheles, H., Prolapse of Gastric Mucosa and Its Possible Relationship with Peptic Ulcer and Upper Gastro-Intestinal Hemorrhage, Am. J. Digest. Dis. 17:65-69, (March) 1950.

43. Long, Leonard, unpublished report to Medical Staff of the Georgia Baptist Hospital, 1950.

44. Rudner, Henry G., Prolapse of the Gastric Mucosa: Report of 22 Cases, Sou. Med. J. 43:480-489, (June) 1950.

45. Artz, C. P., and Gants, R. T., Prolapse of Redundant Gastric Mucosa, U. S. Armed Forces Med. J. 1:639-647, (June) 1950.

46. Clifford, Wm. J., McCallen, Albert M., and Keschner, Harold W., Prolapsed Gastric Mucosa, Sou. Surgeon 16: 627-634, (July) 1950.

47. McGinty, Arthur Park, Prolapse of the Gastric Mucosa, J. Med. Assoc. Ga. 40:95-99, (March) 1951.

48. Sandweiss, David J., Peptic Ulcer, p. 221 (Templeton, Frederic E.) and p. 279 (Wilbur, Dwight L.), W. B. Saunders Co., 1951.

DISCUSSION:

DR. MAX MASS (Macon): The best proof of the validity of prolapsed gastric mucosa as an important clinical entity is the unquestionable relief from hemorrhage experienced by some patients subjected to surgery. Relief following medical management is harder to evaluate. I like to consider prolapse as primary or secondary. In the primary category, I would place those for which no cause can be found and, in the secondary, those due to ulcer, systemic disease, and inflammatory processes. I have had the good fortune to examine two cases, both roentgenologicaly and the fresh resected specimen. Both cases I interpreted as antral gastritis with prolapse. In both instances, serial coronal gross sections revealed a point of cohesion of the submucosa to the muscularis. There was a grossly visible reduction in the height of the overlying glandular column but no ulceration. In both these cases, the prolapse was eccentric and polypoid in character. I believe these cases were healed minute acute peptic ulcerations. In one instance, chronic bleeding was relieved by the resection.

My own feeling is that true symptom-producing prolapse, which can be demonstrated to protrude at the height of the patient's symptoms and reduce itself during relief and then is cured by surgery, is uncommon.

Dr. Johnson is thoroughly aware of the pitfalls of roentgen interpretation when he points out that one of his worst cases showed very meager evidence of prolapse. Obviously, the radiologist must patiently observe the functional activity of the gastric outlet, since in many instances the prolapse will not be apparent in routine studies.

DR. W. E. STOREY (Columbus): I, for one, feel indebted to Dr. Johnson for bringing to my attention this matter of prolapse and the recognition of structural gastroenterologic defects.

I have been accustomed to think of three common disorders—ulcer, malignancy and the biliary diseases. In my experience the overwhelming majority of patients with those symptoms have fallen into those three groups, and therefore I have tried to take an adequate history and to investigate both the gastro-intestinal tract and the biliary system.

I am sure that I have seen numerous cases in which, had I realized the existence and prevalence of this disorder, I might have done more for the patient. If Dr. Johnson has time in rebuttal, I would appreciate his telling us upon what basis he suspects prolapse. He mentioned a patient in whom he suspected it and later confirmed it.

DR. ALLEN H. BUNCE (Atlanta): The paper by Dr. Johnson is very timely. We have been overlooking these things. I am sure that I have seen cases of prolapse of the gastric mucosa and didn't know what I was dealing with. Some of them improved and others didn't. I can say. though, that the condition does exist.

We have not seen it as frequently as Dr. Johnson has. because our work is general internal medicine, and the patients will get well if properly managed and if you can get the proper cooperation of the patient and the patient's family.

Right here I might say that in the medical treatment of any gastrointestinal disturbance there are three factors: First, the doctor; second, the patient; third, the family. Unless you can receive cooperation along all three lines, you will not achieve results.

I remarked to Dr. Johnson a few minutes ago that I have seen no happier patient than a man completely cured of prolapse of the gastric mucosa by medical measures.

Can You Top This?

Dr. G. F. Hagood, of Marietta, poses a "can you top this" question for the doctors of Georgia. Since he began his practice in 1904, he has delivered four (4) sets of triplets. Dr. Hagood wonders if any other Georgia doctor has delivered more triplets.

MILTON H. FREEDMAN, M.D., Atlanta

APLASTIC ANEMIA

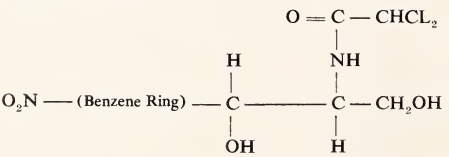
Following the

ADMINISTRATION

of

CHLORAMPHENICOL (*Chloromycetin*®)

Chloramphenicol, an effective "broad spectrum" antibiotic, was originally derived from a soil bacterium (actinomycete) found in Venezuela. Isolated in 1948, it was found to have a relatively simple chemical structure containing a nitrobenzene group and was the only one of the soil antibiotics that could be synthesized. The chemical formula is as follows:



The tendency of drugs which contain the benzene ring in association with N, NH_2, or NO_2 to injure the marrow has been amply demonstrated in previous studies with aminopyrine, dinitrophenol, the sulfonamides and other drugs.

Recently reports have appeared that indicate that use of chloramphenicol may be associated with hypoplastic or aplastic anemia, and it now is becoming apparent that the administration of this drug is not without danger.

REPORT OF CASE

A six-year-old, white, female child was referred on April 21, 1951, because of purpura and thrombocytopenia and was admitted to the hospital on that date. At one year of age asthema was noted, and she had received intensive treatment for this condition with many different anti-asthma preparations. Infection was frequently associated with the asthma, and she had received intermittent antibiotic therapy. Aureomycin was not tolerated, and penicillin seemed to have little effect. In November, 1949, she was given five capsules of chloramphenicol, 250 mg, each, over a two day period. In December, 1950, the asthma became much worse, and she was hospitalized and given a course of cortisone without benefit. Two weeks later in December, 1950, she received a course of ACTH which gave definite relief. During this time she received 23 capsules of chloramphenicol, 250 mg. each. Her condition again required hospitalization in January, 1951; a course of ACTH was repeated; and while in the hospital from January 12 to January 19 she received 13 more capsules of chloramphenicol. She was then allowed to go home, and from January 19 to March 16, she continued to take chloramphenicol, 250 mg. three times each day. The drug was discontinued because easy bruising and ecchymoses had been noted, and investigation revealed a thrombocytopenia. During the many previous hospital admissions and the last one in January, 1951, the blood studies were normal in every respect showing no anemia, no leukopenia, and no thrombocytopenia. The patient was hospitalized from March 26 until April 1, 1951, and again given a course of ACTH primarily because of an aggravation of her asthmatic condition. During this hospital stay frequent counts were done, and on one occasion the platelet count rose to 200,000, but fell again rapidly, and no permanent effect on the blood was noted from the ACTH administration. One week prior to referral she had received one blood transfusion.

Physical examination revealed a temperature of 100.2 degrees, pulse 80, respiration 30, blood pressure 110/65. The child appeared chronically ill with moderate pallor. Numerous ecchymotic areas and petechiae were scattered over the entire body, being most extensive on the legs. There were three small ulcerated hemorrhagic areas on the buccal mucosa. The anterior cervical lymph nodes were enlarged. A soft, grade 2 systolic murmur was present at the apex. The liver was felt one finger breadth below the right costal margin. The spleen was not palpable.

The laboratory studies on admission were as follows: the red blood count was 2,074,000; the hemoglobin was 8.3 grams; the reticulocyte count 0.2 per cent; the white blood count was 3,050 with the differential showing 1 polymor-

phonuclear cell, 2 eosinophiles, and 97 lymphocytes. The platelet count was 16,000.

On April 22, 1951, marrow preparations attained by aspiration from the spinous process definitely contained marrow particles which on smear showed marrow architecture, but were markedly hypocellular. No megakarocytes were seen. Granulopoietic and erythropoietic elements were practically absent. An occasional plasma cell, stem cell, and lymphocyte were present.

The peripheral blood findings of pancytopenia with almost complete aplasia of the marrow definitely established the diagnosis of aplastic or hypoplastic anemia.

The child was given four fresh blood transfusions within the next six days and was discharged from the hospital improved on April 28, 1951. At the time of discharge the hemoglobin was 11.7 grams; the red count was 3,094,000; the white blood count was 3,100 with the differential showing 8 granulocytes, 92 lymphocytes. The platelet count was 12,000.

One month later on May 21, 1951, the patient was readmitted to the hospital. Since the first admission she had received large doses of folic acid, vitamin B_{12}, and iron with little expectation of benefit from these agents. She had also received two blood transfusions. Three days before this admission she had become weaker and had frequent nose bleeds. She appeared acutely ill. Ecchymoses and petechiae were present on the arms and legs. There was marked pallor. Otherwise the physical examination was the same as on the previous admission.

The laboratory studies at this time revealed a red blood count of 1,031,000; the hemoglobin was 3.3 grams; the white blood count was 3,000 with the differential showing 4 granulocytes, 96 lymphocytes. The platelet count was 10,000. The blood bilirubin was normal. A Coomb's test was negative. The red count and hemoglobin were brought up to normal by transfusions. She was discharged from the hospital three days later on May 23, 1951.

One week later on May 30, 1951, the patient was again admitted to the hospital for transfusions for severe anemia. In addition she was given a course of cortisone, receiving 150 mg. the first day, and then 100 mg. a day during the next 14 days without apparent benefit. At the time of discharge from the hospital on June 15, 1951, the red blood count was 4,095,000; the hemoglobin was 14.6 grams; the white blood count was 2,200 with the differential showing 4 granulocytes and 96 lymphocytes. The platelets were still markedly decreased in number.

Two days later on June 17, 1951, it was necessary to readmit her to the hospital because of gastrointestinal hemorrhage. In addition, there was marked hematuria. She rapidly became more anemic and was given more transfusions. There was no essential change in the blood picture as regards the white count and differential and platelets. She began to spike a high fever up to 103-104 degrees. Despite multiple transfusions and other supportive care, her condition rapidly became worse, and she continued to pass blood both from the intestinal and urinary tracts. On June 23, 1951, she expired.

Autopsy revealed numerous ecchymotic and petechial lesions scattered over the body. Massive gastrointestinal hemorrhage was present. There was diffuse hemorrhage in the bladder and in the bladder wall and in the retroperitoneal areas. Ecchymoses of the stomach and renal pelves were seen. Sections of the bone marrow showed marked aplasia. Only scattered islands of cells were seen. The only persistent cellular elements of the marrow were lymphocytes, plasma cells, monocytes and pigment-laden phagocytes. No megakarocytes were recognized. Extra-medullary hematopoiesis was seen in the spleen, lymph nodes and adrenal glands. Cultures of the heart blood were positive for aerobacter aerogenes and hemolytic staphlococcus aureus, coagulase positive. Death resulted from a combination of hemorrhage and sepsis secondary to aplastic anemia.

Comment

Although it is true that the patient had received other drugs, the relationship of the administration of chloramphenicol to subsequent events, the previously normal blood studies, and the fact that this drug seemingly is capable of such, leaves little doubt as to the diagnosis of aplastic anemia due to chloramphenicol in this case.

Smadel[1] pointed out in 1949 that the nitrobenzene structure within the chloramphenicol molecule indicated a potentially toxic effect on the marrow. Volini and associates[2] in 1950 reported three patients in whom toxic hematopoietic effects were seen following administration of chloramphenicol. Hypoplasia with an erythroid and granulocytic arrest of the bone marrow and granulocytopenia developed. The findings returned to normal several weeks after discontinuance of the drug. Rich, Ritterhoff and Hoffman[3] later in 1950 reported a fatal case of aplastic anemia in a 63 year old man following intermittent use of chloramphenicol for a urinary tract infection. Gill[4] reported two cases of reversible granulocytopenia in children treated for Salmonella infection. Janbon and Bertrand[5] reported anemia in six patients receiving chloramphenicol without granulocytopenia or thrombocytopenia. Four of these patients had spontaneous remission; one was thought to respond to vitamin B_{12} and the other to folic acid. In January, 1952, Loyd[6] reported a fatal case of aplastic anemia treated intermittently over one year's time with chloramphenicol, and in May, 1952, Wilson and associates[7] reported two more cases. More recently Dameshek and Campbell[8] reported one case, Rheingold and Spurling[9] five cases, and Hargraves and associates[10] twelve cases.

All of these reports deal with cases in which chloramphenicol was given with therapeutic intention, and the hematopoietic reactions were an unexpected complication. Lindau[11] gave chloramphenicol for 30 days to eight hospital patients who were in a constant state of health to study its effect on erythropoiesis. Arrest of erythropoietic maturation with a definite decrease of orthochromatic normoblasts in the marrow and an average decrease in the hematocrit of 8.6 per cent were noted in three of these patients. After conditions returned to normal, a second 30 day course of chloramphenicol was readministered to two of the three affected patients. Again the hematocrit fell and returned to normal after discontinuation of the drug.

From analysis of their case reports, Hargraves and associates[10] suggest three patterns. One is a sensitivity mechanism as in four cases the bone marrow failure seemed to be precipitated by a second course of treatment, whereas the initial course seemed to be innocuous. In two of these four cases there were immediate drug reactions of nausea and vomiting. Only four capsules of the drug constituted the second course in two cases.

A second pattern seen in two cases was acute aplasia of the marrow precipitated by a single course of the drug.

The third mechanism suggested was gradual suppression of the bone marrow by prolonged administration. Cases in which prolonged intermittent use

has occurred, as in this case, may fall into this group or possibly a sensitivity pattern.

It is interesting that an allergic diathesis was present in this case as was noted in five of their cases.

The cases reported by the other authors would also fit into one of these patterns.

Other drugs containing the nitrobenzene structure have caused marrow hypoplasia with total or selective cytopenia after their intermittent or prolonged use, and it seems that the mechanism of chloramphenicol-induced hypoplasia is probably the same with the development of a hypersensitivity reaction.

In most cases purpura was the presenting sign and appeared about four weeks after the beginning of the precipitating course of the drug. Death in practically all of the cases was the result of uncontrollable hemorrhage.

Cortisone, ACTH, vitamin B_{12}, and folic acid have been tried in many of these cases as was tried in this case, but were without obvious effect. Spontaneous reversal seems to be the exception rather than the rule, and careful hematologic check with cessation of the drug at the first sign of a reaction (which obviously should be done if the drug is used) may not prevent a fatal outcome.

Summary

A case of fatal aplastic anemia following the use of chloramphenicol is reported. Attention is called to other cases in the current literature.

BIBLIOGRAPHY

1. Smadel, J. E., Am. J. Med. 7:671, 1949.
2. Volini, I. F., et al., J. A. M. A. 142:1333, 1950.
3. Rich, M. L., Ritterhoff, R. J., and Hoffman, R. J., Ann. Int. Med. 33:1459, 1950.
4. Gill, P. F., M. J. Australia 1:768, 1950.
5. Janbon, M. and Bertrand, L., Soc. *med. hop.* Paris, 67:990, 1951.
6. Loyd, E. L., Antibiotics and Chemother. 2:1, 1952.
7. Wilson, L. E. et al., J. A. M. A. 149:231, 1952.
8. Dameshek. Wm., and Campbell, E. W., Bull. New Eng. Med. Center 14:81, 1952.
9. Rheingold, J. J., and Spurling, C. L., J. A. M. A. 149: 1301, 1952.
10. Hargraves, M. M., et al., J. A. M. A. 149:1293, 1952.
11. Lindau, W., Abstracts of Proceedings of Amer. Fed. for Clinical Research, No. 72, Atlantic City, N. J., (May) 1952.

MILITARY NEWS

The following is a list of medical officers who have been released from service recently or will be released at an early date. This list is published for those who are trying to obtain physicians to practice in their community. The list is prepared by the Medical Advisory Committee, Selective Service System.

Dr. Eleanor E. J. Bundy, 183 Lamont Drive, Decatur, Ga.
Dr. William R. Daniel, 230 Howard St., N. E., Atlanta, Ga.
Dr. James S. Maughon, 158 W. Lyle Ave., College Park, Ga.
Dr. William F. Moore, Jr., 2223 Kings Way, Augusta, Ga. (Mail returned)
Dr. Ralph P. Parnell, Jr., 1442 Markan Drive, N. E., Atlanta, Ga.
Dr. Charles J. Rey, Jr., 317 Fourth Ave., Decatur, Ga.
Dr. Alfred W. Scott, Jr., 238 W. Springdale St., Athens, Ga.
Dr. Mildred V. Tuggle, 3769 Hamilton Rd., Decatur, Ga.
Dr. Linton H. Bishop, Jr., Unadilla, Ga.
Dr. James L. Clements, Jr., P. O. Box 88, Eatonton, Ga.
Dr. Enon C. Hopkins, 824 Myrick St., Waynesboro. Ga.
Dr. David A. Wells, 519 S. Central Ave., Hapeville, Ga.
Dr. Thomas N. Lumsden, Nacoochee, Ga.
Dr. Ernest William Beasley, Jr., 22 Memorial Dr., SE, Apt. 5, Atlanta, Ga.
Dr. Walter Soler Dunbar, 46 South Prado, N. E., Atlanta, Ga.
Dr. Thomas Jack Howard, Milledgeville Rd., Rt. 2, Augusta, Ga.
Dr. William Lies, III, Lumpkin St., Cuthbert, Ga.
Dr. Julian L. Lokey. 18A Country Club Apts., Augusta, Ga.
Dr. Julius Thornton Rucker, Jr., Washington Rd., Augusta, Ga.
Dr. William Lowe Clarke, Jr., 1041 St. Charles Ave., NE, Atlanta, Ga.
Dr. Frederick B. Thigpen, 517 East 41st St., Savannah, Ga.
Dr. Lovick E. Dickey, Sylvania, Ga. (Residency-General Surgeon) (Capt. 2795th Med. Gp., Robins AFB, Ga.—Release Oct. 1, 1952)
Dr. Beverly W. Forester, 882 High St., Macon, Ga. (Private Practice-Internist. Capt. 2795th Med. Gp., Robins AFB, Ga.—Release 10/1/52)
Dr. Claude L. Pennington, Jr., 1161 Nottingham Dr., Macon, Ga. (Capt., 2795th Med. Gp., Robins AFB, Ga.—Release Oct. 2, 1952) (Plans to enter residency training—Otolaryngologist)
Dr. Bruce C. Newsom, 1640 17th Ave., Columbus, Ga.—Release Oct. 8, 1952 (Capt., 3650th Med. Gp., Sampson AFB, N. Y. Private practice—Gen. Sur.)
Dr. Lawrence S. Bodziner, 10 Washington Ave., Savannah, Ga.—Release Oct. 15, 1952 (Capt., 3380th Med. Gp., Keesler AFB, Miss.—Private practice—Ob and Gyn)
Dr. Alfred L. Watson, Grady Hospital, Atlanta, Ga.—General practice and Internal Medicine.
Dr. Charles E. Owen, P. O. Box 33, Cedartown, Ga.

The following is a list of communities in which their is an opportunity for a physician. This list was prepared by Dr. H. F. Shields, Chairman of the Military Affairs Committee.

Trenton, Georgia—County seat of Dade County, is an unusually good location for one or two good, hustling, sober young men willing to work, able to do internal work and a little surgery. A little 10-15 bed hospital would be very useful and profitable to the doctors, town and community.

Rising Fawn, Georgia, is another good location for a doctor. It is a hustling town too, and there is only one doctor there, between 80-90 years old. Both Trenton and Rising Fawn are located on Chattanooga-Birmingham highway.

Chicamauga, Georgia, certainly could use a doctor. There is plenty of work to do if he is a hustler and sober and willing young man.

M. C. ADAIR, M.D., Washington

Restoring CONCEPTIVE ABILITY *after* STERILIZATION:

Report of a Case

Failure for a woman to conceive may be due to disease involving the reproductive apparatus or to surgery such as hysterectomy, sterilization, or other procedures. Operations to restore conceptual ability have been attempted since the turn of the century. The first successful plastic procedure resulting in a pregnancy and a viable infant is reported by Cullen[1] in 1922. He operated on a patient who had a pregnancy in the left cornu of the uterus. The outer half of the left tube was saved, and the proximal end implanted in the uterine cornu. In the following year the patient delivered a full term infant. Pauktis[2] reported the case of a 25-year-old woman who had had a sterilization for economic reasons after two children. She lost a child and so decided to risk an unsterilizing procedure. The old operation had consisted of a crushing of the midportion of the tubes and tying the loop. He did an end-to-end approximation of the tubes on November 21, 1946. In April, 1947 the patient became pregnant and in Decemeer, 1947, she delivered a full term girl.

Majoska[3] reported a case of a successful reconstruction of the right oviduct at the cornual end in a patient with her left tube previously removed. This woman conceived and successfully delived a 7½ pound baby.

The outlook on operative restoration of the ability to conceive is not too gloomy. Siegler[4] reported 23 cases of tubal occlusions who had plastic operations in which four conceived and delivered full term infants. Von Graff[5] reported 70 plastic operations on the oviducts with 23 term pregnancies. Accordingly, if the circumstances warrant, surgery on the blocked Fallopian tube may be attempted with a fair percentage of gratifying results.

REPORT OF A CASE

Mrs. A. S., 24, white multi-gravida, had a history of three children in rapid succession while still in her teens. In 1945 after the last child, she had a post-partum sterilization which consisted of a cornual resection of the Fallopian tubes and suturing over of the opened uterine wall. This operation accomplished its end, although she divorced her first husband some few months later.

At the age of 23 this patient remarried, and the second husband desired a baby by her. She was unable to produce; accordingly, she sought medical advice. She was told that unsterilizing operations were in general unsuccessful. She accepted this possibility, so on July 21, 1951, laparotomy was performed. There were adhesions between the scar and omentum and the body of the uterus. These were freed. A wedge was cut in each cornu of the uterus down to the endometrium. The Fallopian tubes were severed clean at the proximal ends with a knife and these ends buried in the uterine wall down to the endometrium. The serosa of the tubes was sutured to the serosa of the uterus with gastrointestinal suture without binding the tubes themselves. Layer closure of the abdominal wall was effected.

After the six weeks check-up this patient was advised to go ahead and attempt to become pregnant.

In December, 1951 this patient came to the office with the history that her last menses commenced Sept. 5, 1951. She had had nausea and vomiting and abdominal pain. Pelvic examination revealed a symmetrically enlarged uterus to the size of a three months pregnancy.

On Christmas Day, 1951 she came to the hospital complaining of back ache and lower abdominal pain. The uterus was enlarged three-fourths distance from S to U. She was observed 24 hours and dismissed.

Pregnancy was stormy, and she complained bitterly of lower abdominal pain. Except for this complication, she progressed satisfactorily.

At 12:10 a. m. May 14, 1952, patient was admitted to the hospital in early labor, with history of rupture of the membranes spontaneously a few hours previously. Labor progressed slowly, and at 4:12 p. m. May 14th, she delivered a five pound, nine ounce baby girl in good condition. The patient bled moderately, but left the hospital on the third post-partum day without complications.

The six weeks check showed mother and child doing well.

REFERENCE

1. Cullen, T. S.: Bull. John Hopkins Hosp. 33:344 (Sept.) 1922.
2. Pauktis, C. A.: J. Mich. State Med. Soc. 50:1238-1243 (Nov.) 1951.
3. Majoska: Hawaii M. J. 7:227-228 (Jan. and Feb.) 1948.
4. Siegler: Fertility in Women, J. B. Lippincott, 1944, p. 401.
5. Von Graff: J. Iowa M. Soc. 26:31 (Jan.) 1936.

Special Articles

ENOCH CALLAWAY, M.D., Atlanta

CARCINOMA *of the* PROSTATE

From the findings in routine autopsies and from clinical statistics it can be conservatively stated that 15 per cent of all men over 45 years old will at some time be found to have a carcinoma of the prostate gland. At the present time the large majority of these patients are allowed to develop a far advanced condition before any diagnosis is made or the disease is suspected either by the patient or by his physician.

Although carcinoma of the prostate may be present with urinary obstruction caused by other prostatic diseases, it is rarely the actual case of the obstruction, and in approximately 50 per cent of cases there is no obstruction in corcinoma of the prostate until it has reached a very advanced stage. From this it can be seen that there is no consistent or adequate danger sign which can be depended upon to warn a man that he is developing a carcinoma in the prostate gland. Routine rectal examination of all male patients 40 years old or older is the only method by which carcinoma in this location can be detected.

To the examining finger a carcinoma of the prostate is felt as a nodule, usually located in the posterior portion of the prostate gland. This nodule may be rubbery, semi-soft or stony hard. All nodules felt in the prostate gland are not malignant, but if a nodule is felt in the prostate gland the patient should have adequate investigation to rule out the possibility of cancer. Biopsies should be done where they are indicated.

If it is found, early carcinoma of the prostate can be cured in an extremely high percetnage of cases by a radical operation which removes the prostate with its capsule and a portion of the bladder and membranous urethra. There are two techniques for carrying out this procedure; the more recent technique is a radical retro-pubic prostatectomy. The proponents of this technique claim that it results in less incontinence and less formation of fistulae. The radical perineal prostatectomy has been performed for a great many years and has proven its value in the cure of prostatic cancer. It has the advantage that a better exploration of the gland can be carried out, and if necessary biopsies can be performed and pathologist can make an immediate examination and diagnosis prior to the decision to carry out the radical procedure. Neither method is simple, easy or free from unpleasant sequelae, and this operation should be performed only by operators who have had adequate training and experience in such procedures.

Even though carcinoma of the prostate is past the point where a hope for a cure may be expected from the radical procedure, results are often excellent with castration and administration of estrogenic hormones, combined with removal of prostatic tissue either by surgery or by transurethral resection to assure good urinary function. There are many patients living well past the five year period who have been treated by a partial removal of the prostate, castration and hormone therapy.

If every doctor would routinely make a rectal examination on all male patients 40-years-old or older, the cures in this disease could be increased tremendously and the mortality from this condition reduced proportionately.

Physicians should feel as great an obligation to make rectal examinations on their male patients as they do to make vaginal examinations on their female patients.

L. M. CLARKSON, Atlanta

MILK PROTECTION *in a* CIVIL DEFENSE *Program*

Ever since the bombing of Hiroshima and Nagasaki, consideration has been given to the possibility that some day similar bombs might be dropped on American cities. Failure of the great powers to agree on a practical method for limiting the production of atomic weapons materially increased that risk. Finally, the development of an atomic bomb by the Soviet Union together with the Kremlin's policy of expansion changed what was once a remote possibility into a real and present danger.

There is little doubt that air raid bombing would seriously disrupt some of our vital industries. According to the National Resources Board, "It is probable that the enemy would attempt at the outset to destroy or cripple the productive capacity of the United States and to carry direct attack against civilian communities to disrupt support of the war effort." Of the many large industries in the United States, the most vital is the production and distribution of food. And of the many food products available, one of the most important is milk.

It is generally agreed that milk sanitation and pasteurization are the two safeguards which are protecting the public against milkborne outbreaks of a number of different diseases. Milk is not only one of nature's most valuable foods, it is also an excellent medium for the growth of harmful bacteria. Any disruption in the normal processing of milk supplies might lead to the introduction of disease-producing organisms which, in turn, would cause illness among the consumers.

It has been said that we can do without milk in an emergency. But will we do without it? If faced with a choice of being deprived of milk or of drinking a potentially unsafe product, there is no doubt that many would continue to consume milk without being too concerned as to its quality.

In time of emergency, the problem of maintaining an uninterrupted and safe milk supply is highly important and extremely difficult. Regular supply routes might be disrupted. Contamination might occur anywhere along the line from the rural dairy to the municipal plant and from the plant to the consumer. A civil defense program must take into consideration all of the many problems which might be encountered during an emergency.

The evacuation of large numbers of people from their homes under emergency conditions would present a complicated problem in mass feeding. It would be difficult to supply the demand for milk even under favorable circumstances. If the main supply routes were disrupted, the problem would be greatly increased.

Bombing might disrupt the normal processing of milk and lead to contamination in a variety of ways. The destruction of pasteurization plants would remove the most important safeguard against harmful bacteria. The disruption of electric power would have a similar effect. Moreover, it would interfere with sterilization and, also, with refrigeration. The contamination of water supplies might lead to contamination of milk supplies.

Radioactive contamination of fluid milk might occur but the danger is probably not very great. Exposure to war gases is a more likely hazard, and milk thus exposed, would be dangerous for both man and animals.

Little has been said about sabotage in connection with milk. It is a possibility, however, which should not be overlooked. Tremendous numbers of organisms could be carried in small containers and released in bottling plants so as to contaminate equipment and gain access to the milk. Opportunities for sabotage would be enhanced during blackouts and even during actual raids.

It is easy enough to enumerate the hazards which might be encountered during an emergency. It is much more difficult to devise a plan which will solve all the problems. Experiences during the Second World War provide helpful information in dealing with a possible emergency. During the bombing of London, uninterrupted milk supplies were maintained from country stations to municipal plants and from plants to consumers. This was not only important from a nutritional standpoint, it had a very favorable effect on public morale.

The employment of atomic bombs, of course, greatly increases the magnitude of the problem. But it is not insuperable. Plans for the maintenance of a safe milk supply should be available in the event of an emergency.

*Director, Public Health Engineering, Georgia Department of Public Health.



THE CALICO HOUSE

The Early History of

EMORY UNIVERSITY HOSPITAL

The object is to relieve human suffering, heal the sick, restore the wounded, and, by such ministries to the bodies of men, promote Christianity. Its regulations are framed with reference to the accomplishment of these ends, and all who are engaged in its service are expected to keep them in view as the ends for which the resources of the institution are given and expended.

With these words of consecration, Wesley Memorial Hospital and the School of Nursing opened their doors for service to mankind on August 16, 1905. Today as Emory University Hospital and School of Nursing, they continue their efforts—the climax of a long dreamed dream combined with boundless efforts and the continued generosity of many loyal workers.

To get to the founding of these two institutions it is necessary to return to the year 1902. The First Methodist Church, whose house of worship was, at that time, on the corner of Peachtree and Houston Streets where the Candler building now stands, decided they would move "out"—far away from the city's bustle and dine. To accomplish this, they purchased a lot on the corner of Peachtree and Porter Place, built their church which they occupy today. To many members this was a drastic move and no doubt there was much dissension about moving their church so far away from the center of Atlanta! If these founding fathers should return today!

But whatever the membership of First Church felt about the move, other Methodists in Atlanta viewed the developments with real alarm. No Methodist Church in mid-town Atlanta! Such a situation was unthinkable and steps must be taken to remedy it and soon. Plans were set in motion, verbally at least, that the Methodists should erect another mid-town edifiice just as early as possible in order to do their part in the religious life of the then fast growing city. Through the written and spoken word these hopes and plans were made known throughout the city, state and as far outside as interest could be found. Their banners were held on high.

While the leaders of the church and the laymen,

MAYBELLE JONES DEWEY, Atlanta

with determination and confidence, were putting their shoulders to the wheel to build the new church, an editorial appeared in the Methodist paper, the *Wesleyan Christian Advocate,* which said that the year 1903 would be the bi-centennial of the birth of John Wesley the father of Georgia Methodism; that the members would honor themselves if they would signalize this event by building a striking monument for the welfare of mankind. Why not indeed? The proposed church would be the greatest tribute to the teachings of their founder. The suggestion was fuel to the enthusiasm of the leaders and thus the acorn was planted from which the oak did grow. Wesley Memorial Church, Emory University, Emory University Hospital and School of Nursing today stand as results of this faith and works. As plans developed, the church leaders found themselves carrying out in full Christ's three fold command 'to teach,' 'to preach,' 'to heal.' Teaching was being worthily accomplished at Emory College in Oxford; preaching was always to the fore whenever members were gathered to worship; the command to heal was yet to be realized and now the appointed time had come.

It is difficult to separate the various activities which brought into existence Wesley Memorial Church and Wesley Memorial Hospital as the efforts for both were interwoven, some leaders lending their strength to one, some to the other. There were forces at work in every direction but it must be remembered that there were more ambitions than dollars and that definite progress had to be slow. But there was no looking backward.

In 1902 those who were to compose the first membership of Wesley Memorial Church organized themselves for worship in the Old Athletic Hall on Edgewood Avenue and from the first, the future seemed bright. So encouraged were the leaders that their hope for an up-town church would be realized, they purchased a lot on the corner of Ivy Street and Auburn Avenue and there built a temporary structure in 1903. The permanent church of today was completed in 1910.

As this great progress was being made, the following statement was presented to the North Georgia Conference of the Methodist Church, South, which was convened at Griffin in November, 1903:

> At present, however, our immediate and pre-eminent need is the hospital. We thank God that individuals, that cities and other denominations are now providing hospital privileges for our sick, but surely the 170,000 Georgia Methodists will not forever suffer this state of affairs. We are able to provide for our own and help others without regard to race or denomination. We have the wealth and must do the work. Others are even doing charity for our poor. The great Southern Methodist Church has not a hospital in the South Atlantic States.

Here indeed was the challenge in very definite words and those vitally interested proclaimed it far and wide. Their desires and determination evidently bore fruit for, on February 27, 1904 an application for a charter for Wesley Memorial Hospital was made by Warren A. Candler, George Winship, M. J. Cofer, H. Warner Hill, Floyd McRae, George M. Napier, Henry S. Johnson, Asa G. Candler, J. H. McEachern, L. C. Fisher, Samuel B. Adams, W. C. Lovett, W. P. Wallis, Chas. G. Goodrich, Robert T. Daniel and this charter was granted in the March term of the Superior Court of Fulton County.

However, desire, determination, even a granted charter—as important as each was—could not build a hospital. They were not the currency for land, brick, mortar and all else that made for a good institution, inside and out. It must have been evident to the most optimistic that the real effort, the difficult one—that of raising the necessary funds—was just beginning.

Space does not permit the telling of the many efforts, the growing pains which seemed to envelop the leaders. Problems appeared to be without number but no one apparently lost sight of the goal ahead. They truly followed the star. Scores of men and women were at work, children also joined in and all were as of one mind for the job to be done. Here may we pay tribute to the one special benefactor who took up the burden of establishing Wesley Memorial Hospital and never let it down until he saw the full fruition of all his hopes in Emory University Hospital on the Emory campus—Asa Griggs Candler. It is impossible to recount all he did in effort, in planning, in contribution of not only money but wisdom. History seems to say that wherever, whenever there was an emergency in the ongoing of the hospital plan, there was Mr. Candler to meet the need. Not only in this field, but, with his brother Bishop Warren A. Candler, he was the motivating power for the building of Wesley Memorial Church and Emory University. Too much appreciation and praise can not be given to those two giants of the Methodist Church.

As plans began to be realized, quite naturally, the first requirement for the new hospital was a lot on which the needed building could be constructed. In this connection there was one definite demand—namely it should be near Wesley Memorial Church since the hospital was a division of the Church Enterprises. This brought a special problem, for any lot in this vicinity as large as the needed one must be would cost more than those in authority felt they could pay. But the search began and fate intervened; many knew that prayers had been answered. Not only was a well located lot found but on it was a very substantial house constructed of stone, containing 16 rooms and in good condition. With some alterations, it would be quite adaptable for use as a hospital; the cost was $17,000.00.

This was not just an old house; it was one of historical interest, of pleasing architectural lines and well built. Known as the Calico House, located on the corner of Auburn Avenue and Courtland Street, it was constructed in 1860 by Marcus A. Bell and was one of the first fine residences built in Atlanta prior to the War Between the States. It was also one of the few mansions which the invading army of Gen. W. T. Sherman spared and this was due to the fact that it was first, his headquarters, then that of his engineers and finally a hospital for wounded and con-

valescent Federal soldiers. The name was given to the house on account of the outer coat of plastering being painted with intermingled colors—blue, yellow, red—which gave it the appearance of a pattern of calico then popular in Atlanta.

As could be expected, alterations were necessary and it was also soon realized that the space was inadequate for the needs of a hospital. To remedy this, a third story was added. Reports tell us that the usual vicissitudes of building were encountered but the goal was reached and on August 16, 1905 Wesley Memorial Hospital opened its doors. Of this great event we read: "Thus the hospital is on its way. Its history is the story of a gallant fight to strive, to seek and not yield to adversity." Strong foundations these and strong they proved to be.

The day of victory had come and beyond the opened doors there was space to accommodate 50 patients. Thirty-four of Atlanta's leading physicians and surgeons with Dr. Robert Grier Stephens as house physician were ready for duty; the superintendent of the hospital was a woman—Miss Stella Shipley of Washington, D. C. who had filled the same position at the Sibley Hospital in Washington. She was, incidentally, the only graduate nurse of which the hospital could boast; the rest were probationers—willing, anxious but untried. Not only was the nursing staff limited but other services as well. During the first year one servant did all the cooking for the patients and staff and for a few weeks, before laundry arrangements could be completed, one laundress served for the hospital, nurses, doctors.

But from the first day, the patients came; they continued to come and in increasing numbers each year until 17 years later when the doors of greater Wesley Memorial Hospital were opened on the Emory University campus. The experiences of those early days of the doctors, surgeons, nurses make interesting reading. It was as if each one felt the success of the hospital rested on his or her shoulders and they triumphed over difficulties probably unknown in the modern hospital world. Along with these monumental efforts looms the figure of the Rev. Wilbur Fiske Glenn, the chaplain. With the many other duties in his pastoral work, it is said that he visited every patient in the hospital every day; he was the friend and spiritual adviser whom patients and staff learned to love. It is he whose children have risen up to call blessed and have erected beautiful Glenn Memorial Church on the Emory campus in his memory.

The first annual report of Wesley Memorial Hospital in November 1906 showed 355 patients and the cost of maintaining the hospital for the first 15 months was $13,163.00. Each succeeding year showed progress in the number of patients as well as finances and in 1921—16 years after the opening—there were 1,742 patients and an annual income of $99,990.97. The future seemed bright in every way. Soon the need for larger buildings and expanded services was evident on all sides and plans for this development were taking shape. Well located property was bought and all those in authority were thinking only of a greater up-town hospital. Again fate apparently intervened.

During all these months and years another far-reaching event had taken place; Emory University had come to life on the great campus she holds today.

The exact time and place of the decision to build the greater hospital on the Emory campus instead of up-town Atlanta seems not to be known; rather it appears that the whole process of reasoning and decision was gradual. This was, no doubt, due to the great amount of dissension from even the leading men in the medical and surgical world in Atlanta. They let themselves be heard in no uncertain terms. Half of them proclaimed that no patients would go that far for any kind of treatment; the other half insisted that even if the patients could be found, there would be *no* doctors willing to go care for them. Five miles to a hospital! *Never!* Many of the church leaders also had a word to say and we find recorded: "it would make additional difficulty in discipline and in keeping up the moral and religious life of the University." Through all the turmoil there was one man who held to his hope and vision—Asa G. Candler.

There were no doubt many verbal battles of "Yea" and "Nay" during the months of planning and deciding the future of Wesley Memorial Hospital but the "Yeas" came out victorious for, in the *Wesleyan Christian Advocate* of October 8, 1920 we read—shall we say—the triumphant statement:

> Methodists all over Georgia will be interested to know that work on the hospital has begun. The first dirt was broken on last Thursday at 3:30 p.m. It is to be located on the beautiful grounds on the eastern side of the campus of Emory University facing what is known as Clifton Road and it is a magnificent location for it.

Work proceeded and four months were spent in the initial stages of planning and early building. Palmer, Hornbostel and Jones of New York were the architects and Arthur Tufts and Co. of Atlanta were the builders. On January 27, 1921 the ceremony of laying the cornerstone took place with Bishop Warren A. Candler presiding. Wesley Memorial Hospital was indeed on its way.

Though the extent in detail of Mr. Asa Candler's munificent gifts to the hospital will never be fully known, it can be truly said that, at the time, there could have been no building, no equipment and all that makes for a good hospital without his vision, his wisdom, his fortune. But also it may be said that literally hundreds and hundreds of loyal Methodist men and women rallied to the cause. Building materials were contributed and many, many subscriptions in money from $1.00 up came in to swell the amounts required for the unnumbered needs arising.

The Woman's Auxiliary which had done such trail-blazing work at up-town Wesley Memorial accepted the new challenge and was untiring in its continued efforts. The members secured funds into thousands of dollars, huge quantities of linens came through their efforts and much furniture was given because they persisted. Not only in the initial campaigns for the hospital did the women labor but later they stood ready for all the calls of a hospital program. Hostesses stayed on duty all through the building; those with cars transported patients to doctors' offices; some did sewing, some did mending—no call was too great, none too small. With such whole hearted efforts from so many men and women, early and late, success was sure to come and on a November morning, 1922 the greater Wesley Memorial Hospital became a reality indeed and in truth as it opened its doors to some 25 patients who were transferred from the up-town hospital in a fleet of ambulances graciously loaned by Atlanta's morticians.

As the hospital expanded and became more and more a part of the growing Emory University and School of Medicine, those in authority considered a change of name and gradually it became Emory University Hospital.

It is now 1952. Exactly 30 years have passed. The last fiscal report shows that, in 1951, there were 12,718 in-patients 25,000 out-patients with a total of 98,925 patient days and an operating budget of $1,896,063.00.

But there was first—the dream.

Report of American College of Surgeons New York City, September 21-25

Headed by Regent Daniel C. Elkin, of Emory University, and Governor David Henry Poer, Atlanta, more than 75 Georgia surgeons attended the Clinical Congress of the American College of Surgeons in New York the week of September 21. Georgia led all the states in percentage of members persent.

An additional 21 Georgia surgeons were inducted into membership in a colorful ceremony on Friday evening, September 26 at the Waldorf-Astoria Hotel, and received the F.A.C.S. degree.

Georgia doctors inducted were: Lee H. Battle, Jr., Rome; Elisha Judkins Cain, Columbus; Abraham B. Conger, Jr., Columbus; Peter Carl Graffagnino, Columbus; H. H. Hammett, LaGrange; Jack Chandler Hughston, Columbus; Charles S. Jones, Atlanta; John Morgan Kellum, Thomaston; William Russell King,; Jr., Griffin; James J. McDonald, Athens John H. T. McPherson, Athens; Robert Mabon, Atlanta; Edward S. Marks, Marietta; J. F. Mixon, Jr., Valdosta; Lewis G. Norman, Jr., West Point; J. Robert Rinker, Augusta; Roy L. Robertson, Atlanta; Seaborn Anderson Roddenberry, Columbus; Hilton F. Wall, Atlanta; C. W. Whiteworth, Gainesville; and John Gordon Zirkle, Savannah.

Georgia members of the college attending the session were: John T. Akin, Atlanta; Charles R. Andrews, Canton; J. B. Avera, Brunswick; Hugh J. Bickerstaff, Columbus; Edgar Boling, Atlanta; M. B. Bowman, Albany; Robert Brown, Atlanta; Stephen Brown, Atlanta; Grady N. Coker, Canton; Braswell E. Collins, Waycross; George R. Conner, Columbus; H. C. Crawford, Atlanta; J. Harris Dew, Atlanta; Charles E. Dowman, Atlanta; M. J. Egan, Savannah; C. B. Elliott, Cedartown; M. J. Epting, Savannah; Murdock Equen, Atlanta; Drew Ferguson, Jr., West Point; T. J. Ferrell, Waycross; Edgar F. Fincher, Atlanta; T. J. Floyd, Jr., Griffin; L. M. Freedman, Savannah; Wadley R. Glenn, Atlanta; William H. Good, Jr., Toccoa; Kenneth Grace, LaGrange; James A. Green, Jr., Athens; M. M. Hagood, Marietta; B. Hollis Hand, LaGrange; Allen E. Hauck, Atlanta; and J. S. Holder, LaGrange.

Other Georgia members in attendance were: Dan A. Jardine, Douglas; H. W. Jernigan, Atlanta; Robert P. Kelly, Jr., Atlanta; O. D. Lennard, Tennille; H. L. Levington, Savannah; Robert B. Martin, III, Cuthbert; William E. Mayher, Columbus; J. G. McDaniel, Atlanta; John Mooney, Jr., Statesboro; F. K. Neill, Albany; George A. Niles, Jr., Atlanta; J. E. Porter, Savannah; Charles H. Richardson, Jr., Macon; Peter L. Scardino, Savannah; H. A. Seaman, Waycross; James H. Semans, Atlanta; Ben Robert Thebaut, Atlanta; James C. Thoroughman, Augusta; Hoke Wammock, Augusta; C. D. Welchel, Gainesville; Luther H. Wolff, Columbus; Otis C. Wood, Milledgeville; and Peter B. Wright, Augusta.

Guests at College session were: Cordelia Dowman, Atlanta; W. Gibson, Milledgeville; C. A. Jordan, Eatonton: William Mitchell, Smyrna; R. M. Paty, Covington; Fred Schmidt, Marietta; R. M. Sealey, Atlanta; W. H. Waller, Augusta; M. A. Hubert, Athens, and C. E. Irwin, Warm Springs.

Featured on the program were Drs. E. F. Fincher, Robert Kelly and Fred W. Cooper of Emory University. Dr. David H. Poer presided at one of the Friday sessions and Dr. Peter B. Wright participated in the Trauma Symposium. Dr. Wright was elected Governor to represent the State of Georgia along with Dr. Poer.

PRESIDENT'S PAGE



Dr. C. F. Holton
Mag President

It is my privilege as president of the Medical Association of Georgia to point out to you the dire needs of our medical schools.

For a long time now the Federal government has been making efforts to get control of such institutions throughout the United States by granting them financial aid. Several years ago the American Medical Association, cognizant of this move by Oscar Ewing and his associates in Washington, appropriated the sum of one million dollars to be known as the American Medical Association Fund for Medical Education and to be granted to medical schools throughout the United States. That sum was almost immediately matched by members of allied groups such as pharmaceutical manufacturers, instrument makers, etc.

This money was then channeled to the various schools where the need was most pressing. Our two schools in Georgia received thousands of dollars from that source when the need was most urgent.

Since the initial action by the A.M.A., a similar amount has been set aside each year for the fund and I am informed our Georgia schools have but recently received fifteen thousand each from this year's appropriation.

At our state meeting in Atlanta last May a resolution was adopted asking each member of the Medical Association of Georgia to contribute at least ten dollars to the A.M.A. fund. These contributions can, if the donor so desires, be earmarked for any school in the United States.

For the thousands of dollars furnished our two great institutions prior to the beginning of this campaign, we had contributed less than five hundred dollars to the fund from Georgia. That seems hardly fair.

Like everything else the cost of taking a student through medical college has increased tremendously. For instance, according to Dr. Hugh Wood, enrollment at Emory University School of Medicine for the year 1951-52 was 284 students. The budget for the school amounted to $942,559 or a pro-rated cost of $3,320 per student. This however included fringe costs such as training of internes and residents. Emory must receive $225,000 per year from contributions to operate. With large personal fortunes rapidly disappearing as a result of the Washington "mess" it is a mathematical certainty that these contributions now granted will shortly be a thing of the past. With tuition at $800 per year it can clearly be seen that other sources of income will have to be made available and soon.

Dr. Lombard Kelly of the Medical College of Georgia informs me that at present it costs $1,150 per year for the education of his students or a total of $4,600 for the four years necessary to obtain a degree.

These figures do not include the cost of caring for indigent patients used as teaching materiel.

With tuitions at $800 per year and with the rising costs of simply living it has almost reached the point where no poor boy need ever aspire to becoming a physician. Shall we permit our profession to become a rich man's hobby?

We have just exactly two alternatives. Subscribe liberally ourselves each year or federal subsidization with federal control.

Does not each of us owe it to our profession to make it possible for the boys and girls of the future to receive a medical education without bankrupting the family or being told what to study and where to practice by a Washington bureaucrat? I think we do.

We must never forget that the United States Supreme Court has ruled that whatsoever the federal government subsidizes it can also regulate. If we accept federal aid then we must be prepared to be told who shall teach, what they must teach and to whom.

Let us everyone set aside whatever sum yearly we can afford for our two great schools. Let's consider it a thanks offering for having been permitted to practice free medicine during the years since we graduated, and with the offering let us pray that our children and our grand children may enjoy the same privilege. They can if we will make it possible.

If you will forward your check made out to American Medical Association Education Fund to the secretary-treasurer of the Medical Association of Georgia, 875 West Peachtree St., N. E., Atlanta, he will acknowledge it and forward same immediately to the A.M.A.

Time is of the essence.

—C. F. Holton, M.D.

Minutes of the Combined Meeting of the

COMMITTEES *on* PUBLIC POLICY *and* LEGISLATION,

MAG and Fulton County Medical Society

The meeting was held at the Academy of Medicine on Sunday, September 14, 1952, at 10:00 A. M. Attending were Dr. Kirkland, Chairman, Drs. Sellers, Collingsworth, Harbin, Coker, West, Norris, Poer, Davenport, Pendergrast, Hand, and Mr. Dunaway.

First on the agenda was a discussion of legislative matters to be taken up at the next session. It was agreed that the Practical Nurses Bill be re-introduced in the Legislature, and that a Practical Nurse be added to its Board. Dr. Grady Coker agreed to see Miss Hudson to discuss the bill so as to make it acceptable to the Legislators, Doctors, and to the Nursing Profession.

Item Two concerned the three day waiting period and blood tests for marriage. This bill is also to be re-introduced in the Legislature and it was suggested and approved that Dr. Sellers have a conference with House and Senate representatives before the Legislature meets. He was too see Mr. Fred Hand and Mr. Twitty, especially. Dr. Sellers was also authorized to arrange a dinner meeting in October to further discuss this legislation.

The next subject considered dealt with the proposed Healing and Licensing Board. The plan recommended for adoption was that which is now known as the Tennessee Plan. Several defects were called to the attention of the group and it was agreed and approved that a committee be appointed to meet in conjunction with Mr. Dunaway, who would iron out the objectionable features of the law to make it applicable and agreeable in Georgia. Dr. William Harbin was appointed Chairman, with Drs. Palmer, Coker, Poer, Kirkland, and Mr. Dunaway as members of the committee. Dr. Harbin was authorized to call a meeting as soon as he could do so.

A letter from Dr. Tully Blalock was read, which stated that he was very anxious to have a legislative bill enacted permitting the temporary licensing of five years to foreign doctors. This would permit them five years in which to obtain their permanent licenses in Georgia. After careful consideration it was pointed out that these men are now permitted by law to work in State institutions where they are under supervision. Dr. Coker made a motion that the present arrangement be allowed to remain status quo.

The matter of autopsies in Georgia was also considered. Dr. Norris called the Board's attention to the fact that the Georgia Association of Pathologists hoped eventually to have enough pathologists situated over the State to perform medico-legal autopsies; and that they further hoped to get all counties to eventually appoint or elect physicians as coroners ,and working on that basis finally enact a strong medico-legal law.

Mr. Dunaway suggested that it might be possible to establish a medical examiners system in Fulton County. This should be considered as future legislative possibility.

No action was taken on the Optometry Board's problems.

Dr. Sellers, State Health Officer, discussed several matters of interest to the State Health Department. One source of irritation at the moment is that they do not have authority to admit non-resident active tubercular patients to Battey Hospital. These people are a menace to society. He was instructed to confer with Drs. Aven and Hobby and see if they could work out a compromise that would cover the issue.

Dr. Sellers also stated that he would like to have the authority to establish spotty quarantine over the State where needed to prevent and control rabies rather than to have to depend upon enforcement of the general vaccination law. He pointed out that in many areas of the State rabies had been practically eradicated.

And lastly, he hoped to have a measure introduced into the Legislature which would give municipalities and health departments the legal power to enforce health regulations.

Respectfully submitted,

JACK C. NORRIS, M.D.
Acting Secretary for the Committee on Public Policy and Legislation.

News and Information

Officers, Medical Association of Georgia, 1952-53

President: C. F. Holton, Savannah
President-elect: William P. Harbin, Jr., Rome
First Vice-President: Rudolph Bell, Thomasville
Second Vice-President: James H. Semans, Atlanta
Secretary-Treasurer: David Henry Poer, Atlanta
Executive Secretary: Sid Wrightsman, Jr., Atlanta

DELEGATES TO THE AMA

Terms Expire December 31, 1953:
C. H. Richardson, Macon
C. L. Ayers, Toccoa, *Alternate*
Terms Expire December 31, 1954:
Eustace A. Allen, Atlanta
William R. Dancy, Savannah, *Alternate*

COUNCILORS

District	*Term Expires*
1—Lee Howard, Savannah	1955 Session
2—George R. Dillinger, Thomasville	1955 Session
3—W. G. Elliott, Cuthbert	1955 Session
4—J. W. Chambers, LaGrange	1955 Session
5—Marion C. Pruitt, Atlanta	1953 Session
6—H. Dawson Allen, Milledgeville	1953 Session
7—D. Lloyd Wood, Dalton	1953 Session
8—Sage Harper, Douglas	1953 Session
9—W. Bruce Schaeffer, Toccoa	1954 Session
10—H. L. Cheves, Union Point	1954 Session

VICE-COUNCILORS

District	*Term Expires*
1—Charles T. Brown, Guyton	1955 Session
2—Carl S. Pittman, Tifton	1955 Session
3—Guy J. Dallard, Columbus	1955 Session
4—Clarence B. Palmer, Covington	1955 Session
5—John W. Turner, Atlanta	1953 Session
6—H. G. Weaver, Macon	1953 Session
7—M. M. Hagood, Marietta	1953 Session
8—J. A. Leaphart, Jesup	1953 Session
9—Charles R. Andrews, Jr., Canton	1954 Session
10—J. Victor Roule, Augusta	1954 Session

EXECUTIVE COMMITTEE

C. F. Holton, *President*, Savannah
David Henry Poer, *Secretary-Treasurer*, Atlanta
H. Dawson Allen, *Chairman of Council*, Milledgeville
W. Bruce Schaeffer, *Member of Council*, Toccoa

ANNOUNCEMENTS

OCTOBER 20-24: Emory University School of Medical offers Course No. 3, Cardiovascular Disease, as a postgraduate course arranged by the American College of Physicians. The course, to be held at Emory University Hospital, is designed for those with a background in Cardiology.

OCTOBER 28-29: The Georgia Urological Association, the Georgia Chapter of The American College of Surgeons and the Georgia State Obstetrical and Gynecological Society will hold their annual meeting in the Ralston Hotel, Columbus, Georgia. Feature guest speakers include: Dr. Harold L. Foss, President, American College of Surgeons, Danville, Pa.; Dr. Edward L. Churchill, Professor Surgery, Harvard University, Boston; Dr. Grant E. Ward, Associate Professor Surgery, Johns Hopkins University, Baltimore; Dr. Parke G. Smith, Former Associate Professor of Urology, University of Cincinnati, New Orleans, Miami; Dr. Lester A. Wilson, Professor of Obstetrics and Gynecology, University of South Carolina, Charleston, S. C.; Dr. Lee C. Schlesinger, Instructor in Orthopedics, Tulane University, Turo Infirmary and Charity Hospital, New Orleans; and Dr. Lawrence L. Hester, Department of Obstetrics and Gynecology, Medical College of South Carolina, Charleston, S. C.

OCTOBER 28: Muscogee County Medical Society will hold its October meeting at the Ralston Hotel. Columbus, in conjunction the Georgia Chapter of The American College of Surgeons and the Georgia Urological Association.

OCTOBER 30-31, NOVEMBER 1: The Southeastern States Cancer Seminar meeting will be held at the Tampa Terrace Hotel, Tampa, Florida. This Seminar is sponsored by the Florida Cancer Council which includes representatives from the State Medical Association, American Cancer Society, American

College of Surgeons, and the Florida State Board of Health.

NOVEMBER 5-19: A postgraduate course on the care of prematures is being offered at the Charity Hospital of Louisiana, New Orleans. For further particulars write: Elaine Allen, M.D., Medical Director of Premature Infant Center at Charity Hospital.

NOVEMBER 6: The Fifth District Medical Society will meet at the Academy of Medicine, Atlanta. The scientific program will begin at 8 p.m. featuring Dr. Richard J. Bing, Professor of Experimental Medicine at the Medical College of Alabama, Birmingham, who will present "Modern Diagnostic Methods in Cardiovascular Disease," and Dr. Dean W. Roberts, Director of the Commission on Chronic Illness, Baltimore, who will speak on "Problems of Chronic Illness."

NOVEMBER 6: The Fulton County Medical Society, host to the Fifth District Medical Society, will hold its meeting in conjunction with the Fifth District meeting at the Academy of Medicine, Atlanta. The program is noted in the above paragraph.

NOVEMBER 7: The Annual Health Education Day meeting at the Academy of Medicine, Atlanta, will feature Dr. Dean Roberts, Director of the Commission on Chronic Illness, Baltimore, who will lead the discussion and head the panel on Chronic Illness in Atlanta. Doctors, Auxiliary members, PTA groups, church groups, club groups will receive special invitations and the public is invited to attend this program.



Dr. Dean Roberts

SOCIETIES

Second District Medical Society held its semi-annual meeting at the Elks Club, Bainbridge, October 2. Dr. John S. Atwater, Atlanta; Dr. John B. Morton, Thomasville, and Dr. N. H. Hutchison, Moultrie, presented papers in the scientific program. A social hour and dinner followed this program.

Fourth District Medical Society held its Fall meeting at the Highland Country Club, LaGrange, September 30. The guest speaker was Dr. Bruce Logue, Atlanta.

Seventh District Medical Society met at the Marietta Country Club, Marietta, September 17, as guests of the *Cobb County Medical Society*. The scientific session in which papers were presented by Dr. T. J. VanSant, Jr., Marietta; Dr. Edward S. Mark, Marietta; Dr. M. M. Hagood, Marietta and Dr. C. S. Glisson, Atlanta, was followed by a barbecue supper. Their next meeting is scheduled for the first Thursday in April, 1953.

Ninth District Medical Society met at the Veterans Club Building in Commerce, September 17. Scientific papers presented by Dr. Martin Smith, Gainesville; Dr. John Cross, Atlanta, and Dr. C. F. Holton, President of the MAG addressed the group. The Ninth District's next meeting is slated for April, 1953.

Bibb County Medical Society met at the State Health Department Building, Macon, September 2. Two papers were presented as part of the evening program by Dr. Edmond H. Brannan, Macon.

Fulton County Medical Society met at the Academy of Medicine October 2 for a scientific session. Dr. Edward A. Schumann, of Philadelphia, was presented by the E. C. Davis Memorial Lecture. Dr. Schumann spoke on "Obstetrical and Gynecological Infections and Their Treatment With the Antibiotics."

Georgia Medical Society, at their meeting October 14, had as their guest speaker, Dr. Leslie B. Hohman, Professor of Psychiatry, Duke University, Durham, N. C.

Jackson-Barrow County Medical Society held their meeting at the Winder-Barrow Hospital on September 29. Dr. Jack McDonald presented a paper on "Acute Cholecystitis."

Muscogee County Medical Society held their September meeting at the Officers Club, Fort Benning, September 15. The program was presented by

the medical staff of the Fort Benning Hospital.

Toombs County Medical Society met at the New Vidalia Hotel, Vidalia, September 17. Guest speakers were: Dr. John L. Chandler, Orthopedic Surgeon, Augusta; and Dr. Louis O. J. Manganiello, Department of Neuro-surgery, University Hospital, Augusta; who spoke on the subject of "The Immediate Care of the Traumatic Patient."

Troup County Medical Society at their quarterly dinner meeting at the Highland Country Club, August 22, had as their guest speaker Dr. R. A. Bartholomew, Atlanta. Dr. Bartholomew spoke on the subject of "The Significance of Hypertension in Pregnancy."

Ware County Medical Society, at their September meeting presented Dr. T. J. Ferrell, Waycross, who spoke on "Infertility in Women and Hystero Salpingogram." Dr. W. C. Calhoun, Waycross, assisted Dr. Ferrell in this address.

DEATHS

CHANDLER: *Dr. William Vance Chandler,* 85, of Baldwin, died at his residence after an extended illness August 10. Dr. Chandler was born in Greenville County, S. C. He was a graduate of Chattanooga Medical College, 1896. Dr. Chandler practiced medicine in Baldwin for the past 50 years. He retired in 1946.

CHEEK: *Dr. Pratt Cheek, Sr.,* 67, of Gainesville, died August 26. A native of Gordon County, Dr. Cheek was a general practitioner in Gainesville for the past 32 years and served as secretary for the Ninth District Medical Society for 20 years. He attended the Atlanta School of Medicine and after receiving his degree, he did postgraduate work at Harvard Medical School. Dr. Cheek practiced in Lavonia and Clermont before coming to Gainesville in 1919.

COBB: *Dr. Tyrus Raymond Cobb, Jr.,* 42, of Dublin, died September 9 at Palo Alto, California. Dr. Cobb, Jr., a native of Augusta, graduated from the Medical College of Charleston, S. C. He interned at the University Hospital, Augusta and was engaged in practice for about nine years when he was stricken with a fatal illness.

HAIR: *Dr. William B. Hair,* 60, of Summerville, died September 5 at Summerville. Dr. Hair was a graduate of Emory University School of Medicine. He started his practice in Summerville in 1923 and operated his own hospital until his retirement in 1945.

HAYS: *Dr. W. C. Hays,* 72, of Colquitt, died suddenly at his home in Colquitt September 14. A native of Miller County, he practiced for 44 years in Colquitt, unitl his retirement two years ago.

HUMPHREY: *Dr. Thomas S. Humphrey,* 77, of Springfield, died at his home August 20. A native of Cherryville, Pa., Dr. Humphrey came to Springfield about two years ago as a practicing physiican. He received his medical education in Baltimore, Md.

HUMPHREYS: *Dr. Alexander S. Humphreys,* 86, of Brooks County, died at the Brooks County Hospital September 4, following an illness of two months. Dr. Humphreys was born in Brooks County. He practiced in Florida before starting his practice in Brooks County. Dr. Humphreys had retired about ten years ago.

MANGET: *Dr. James D. Manget,* 70, of Atlanta, died August 16, at his residence in Atlanta. Born in Marietta, he graduated from the Atlanta College of Physicians and Surgeons in 1904. Dr. Manget interned at Grady Memorial Hospital, later served in World War I, and was for a number of years Chief of Staff at Georgia Baptist Hospital.

PERSONALS

Dr. William W. Bryan and *Dr. J. Dudley King,* of Atlanta, announce their association for the practice of radiology in Atlanta.

Dr. Glenn J. Bridges, of Atlanta, announces the removal of his offices to 157 Forest Avenue, Atlanta, with a practice limited to urology.

Dr. Ovid B. Bush, of Atlanta, was awarded a commendation by the UN Civil Assistance Command for his work in Korea as a medical missionary at the Chonju Presbyterian Hospital, which he directs.

Dr. Edgar Boling, of Atlanta, was elected Vice President of the Piedmont Proctologic Society at that organization's recent meeting in Winston-Salem, N. C.

Dr. Wilbur T. Clonts, of Oakland, Florida, will assume the practice of *Dr. Earl Benson,* of Marietta, while Dr. Benson completes his study of anesthesiology at the Medical College of Augusta. Dr. Benson plans to specialize in this field when he returns to Marietta after two years of study.

Dr. J. Harris Dew, of Atlanta, announces the removal of his office to the Howell House, Suite 4, 710 Peachtree Street, Atlanta.

Dr. John A. Duncan, of Rochelle, has established his office at 111 Seventh Street, Cordele, for the practice of general medicine with special attention to skin diseases.

Dr. William F. Friedewald, of Atlanta, announces the removal of his office to the Doctors Building, Atlanta.

Dr. Fletcher Oland Garrison, of Demorest, announces the opening of offices in Demorest for the practice of general medicine and surgery.

Dr. David F. James, of Atlanta, announces the removal of his offices from Emory University Hospital to 104 Ponce de Leon Avenue, Atlanta.

Dr. Chris J. McLoughlin, of Atlanta, left for Athens, Greece on October 9. Dr. McLoughlin is attending the Sixth Annual Meeting of the World Medical Association as official observer for the United States Committee. In this capacity, he will also attend meetings to be held in Rome, Geneva and Paris. Mrs. McLoughlin will accompany him on this journey.

Dr. Franklin C. Miles, of Atlanta, is associated with The Neuroclinic in the practice of neurological surgery at the Doctors Building, Atlanta.

Dr. Hal C. Miller, Dr. T. R. Staton and *Dr. William Harry Hill,* of Atlanta, announce the removal of their offices to the Howell House, 710 Peachtree Street, Atlanta.

Dr. T. L. Parker, of Atlanta, recently returned from duty with the U.S. Navy, has opened his office in the Doctors Building, Douglas.

Dr. Ben S. Read, of Atlanta, announces the removal of his offices to the Medical Arts Building, Atlanta.

Dr. Edward D. Reisman, of Atlanta, announces the opening of his offices at 729 Piedmont Avenue, Atlanta, for the practice of general surgery.

Dr. Bruce Schaefer and *Dr. Robert Shiflet,* of Toccoa, have moved into their new office building, called the Medical Arts Building, Toccoa.

Dr. P. C. Shea, Jr., of Atlanta, whose practice is limited to general surgery, announces the removal of his office to 1001 Medical Arts Building, Atlanta.

Dr. R. H. Stephenson, of Atlanta, announces the removal of his office to the Howell House, 710 Peachtree Street, Atlanta.

Dr. John S. Walker, of Atlanta, announces the opening of his offices for the practice of pediatrics at 104 Ponce de Leon Avenue, Atlanta.

Dr. George A. Williams and *Dr. A. Cullen Richardson,* of Atlanta, announce the removal of their offices to the Howell House, 710 Peachtree Street, Atlanta, for a practice limited to obstetrics and gynecology.

Dr. Edgar Woody, Jr., of Atlanta, has associated with Drs. Carter Smith, Charles F. Stone, Jr., F. Levering Neely and Edward K. Russell in a practice limited to internal medicine.

Dr. James L. Campbell, Jr., of Valdosta, will be associated with *Dr. Louis M. Orr* at 1300 Kuhl Avenue, Orlando, Florida, in the practice of urology.

HOSPITALS

Dr. Fred Coleman was named chief of staff of the Laurens County Hospital by the Laurens Medical Society at their last meeting. Dr. Coleman assumed the duties of the staff chief when the hospital opened in September.

Dr. Rufus Payne, who is leaving as superintendent of Battey Hospital to become the head of the new state general hospital at Augusta, was the guest of honor at a testimonial dinner given by the Rome Chamber of Commerce on August 28. Among those notables who offered praise and commendation for Dr. Payne's work at Battey Hospital were Dr. T. F. Sellers, director of the State Board of Health; Dr. Robert Norton; Dr. William Harbin, president-elect of the Medical Association of Georgia; and former health department head Dr. T. F. Abercrombie.

Dr. Albert Bush left Hawkinsville to assume a position on the staff of the Veterans Administration Hospital in Dublin. Dr. Z. S. Sikes, Jr., of Augusta, has also joined the staff of the VA Hospital as Staff Psychiatrist.

Dr. W. D. Willcox, of Fitzgerald, has been named medical supervisor of the Ben Hill County Hospital.

Dr. J. R. Williams, Jr., of Lavonia, moved into his new, modern clinic on Augusta Street in Lavonia early last month. The clinic is one of the most up-to-date clinics located in Northeast Georgia having 12 rooms. It is constructed of brick, concrete block, glass block and crab orchard stone.

AUXILIARY

Cobb County Medical Society Auxiliary held a business luncheon meeting in Marietta August 19, and reviewed progress of the two projects operated at the Kennestone Hospital under their auspices. The projects are a gift shop and a new-baby photography service. Proceeds from these two projects are given to charity interests and the formation of a doctors' library.

Fulton County Medical Society Auxiliary had a gala time at their September 5th meeting when the program was devoted to reports by the women of the Auxiliary who had summer trips abroad.

Their meeting on October 3rd featured Mr. Ralph Eusden, President of the Women's Auxiliary to the American Medical Association and Dr. Ernest B. Howard, Assistant Secretary of the American Medical Association and Liaison Officer between the Auxiliary and the AMA. They both spoke on the program and leaders from all over the state met these distinguished guests.



Dr. Ernest B. Howard



Mrs. Ralph Eusden

Richmond County Medical Society Auxiliary began their activities for the coming year with a membership tea at the Augusta Country Club, September 23. The special guest and speaker at the tea was Mrs. Ralph W. Fowler, of Marietta, President of the Women's Auxiliary to the Medical Association of Georgia. Mrs. Fowler spoke on the importance of auxiliary membership.

Ware County Medical Society Auxiliary held their first Fall meeting in the Grace Church Parish House, Waycross, September 11. The three main objectives for the year as stated by Mrs. Ansley Seaman, President of the Auxiliary, were nurse recruitment, civil defense and membership.

BOOKS

REVIEWS

PHARMACOLOGY IN CLINICAL PRACTICE by Harry Beckman, M.D., Director, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; and Consulting Physician, Milwaukee County General Hospital and Columbia Hospital, Milwaukee, Wisconsin. W. B. Saunders Company, Philadelphia, 1952, 839 pages, $12.50.

This fine, modern treatise on pharmacology reflects the teaching philosophy and personality of its author. Dr. Beckman believes, and rightly so, that medical students should learn about drugs in their natural habitat; the drugs should be associated with the patient and disease in which they are to be used.

The first section, covering some seven hundred

pages and titled, "Clinical Use of Drugs," is divided into 19 subsections ranging from Allergy through Venereology. Each drug is considered under each and every indication for its use. The principal pharmacological discussion, however, appears under its most common use. For example, digitalis is considered primarily under Congestive Failure in the subsection on Cardiology. It also appears briefly under such headings as Nephritis, Uremia, Myxedema and Rheumatic Fever. Three classes of drugs, Antibiotics, Autonomic Agents and Sulfonamides, have their own subsections.

The pharmacology and therapy are modern in every respect. All of the newest drugs and treatments are included. The writing is free, lucid and often humorous. The typography and many figures and tables makes the presentation interesting and understandable. The "suggested excursions into the literature" are valuable and well selected. All in all, the book should be most attractive to students and practitioners.

What has been omitted — and deliberately — are such things as the historical aspects of drugs and the relationship between structure and biological activity. As Dr. Beckman states in his preface, these are very important to pharmacologists and graduate students but not to medical or dental students or practitioners in either field. This book is specifically designed for medical and dental teaching.

The second section of the book, comprising about 50 pages, is a "Compendium of Drugs." Here are given briefly the chemical and physical properties of the drugs, and examples of the commercial preparations available.

The book closes with a very complete index.

It is the opinion of this reviewer that Dr. Beckman's new book, the successor to his popular "Treatment in General Practice," will prove of great interest and value to teachers, students and practitioners in medicine and dentistry.

—Raymond P. Ahlquist, Ph.D.

PHYSICIAN'S HANDBOOK, by Marcus A. Krupp, M.D., Norman J. Sweet, M.D., Ernest Jawetz, Ph.D., M.D., Charles D. Armstrong, M.D. Seventh Edition. Los Altos, California: Published by Lange Medical Publications, 1952.

The purpose and contents of this book are indicated in the foreword of the present edition, which says that it summarizes briefly and clearly those procedures and factual data that have been most useful and acceptable. A few basic principles are also discussed to aid in understanding the material. This book is an accumulation of factual data and procedures used in all phases of medicine. It places in one book information that can be found in numerous other books and articles. It contains obstetrical measurements, pediatric tables, routines for preparing patients for x-ray procedures, care of surgical patients, diet lists, uses of various drugs, etc. The greater portion of the book is devoted to laboratory procedures, their interpretation, and results expected.

Honoring Dr. Mobley

The first of four rooms in the Dooly County Hospital has been furnished by the wife and children of Dr. H. A. Mobley, of Vienna, in his honor. This room will have a plate on the door which will read: "Given by his wife and children in honor of Dr. H. A. Mobley."

There are numerous tables of normal values and other factual data. In a book of this nature, it seems that an unusual amount of space was devoted to interpretation of electrocardiograms. In the section on drugs there was no mention of aplastic anemia as a possible complication of the use of chloromycetin.

The chief value of this book should be as a ready source of data for medical students and interns, and for practitioners in fields other than their own. The information presented is not new and should be familiar to most physicians except for that confined to certain specialties with which the physician is not concerned or may have forgotten in limiting his practice.

—Sandy B. Carter, M.D.

PHYSICAL DIAGNOSIS, by Harry Walker, M.D., F.A.C.P. New York: Published C. V. Mosby Co., 1952.

This volume represents the combined effort of several members of the faculty at the Medical College of Virginia. It's stated purpose is to "describe the clinical signs which are generally considered most valuable, and at the same time, to include some of the generally known useless ones." The authors feel that their quest to separate the diagnostic wheat from the chaff is greatly facilitated by the recent advances in pathology, and the more exact clinical diagnostic aids now available. Instead of rendering well established physical signs obsolete, they believe that our newly established diagnostic facilities should place physical diagnosis on a firmer foundation than ever. While this concept is not original and is generally accepted, the authors have stated this as the *raison d'etre* for their new book.

The format is standard. The systems are covered in order. There is a short section devoted to the taking of the history and its relative importance in establishing a diagnosis. Most of the recent works on physical diagnosis have effectively used an increasing number of illustrations. In the present volume colored plates have been omitted. Black and white figures are utilized on an average of one in every four pages. As a first edition the book has an expected number of typographical errors. It is felt that it's greatest defect lies neither in its general form nor in its high purpose, but in its incomplete cover-

The Catfish Story

A catfish—the grand-daddy of all catfish was caught at Tugalo Lake, near Tallulah Falls according to Dr. Hartwell Joiner, of Gainesville. The catfish weighed 90 pounds and was some six feet long. The huge fish was caught by two Tallulah Falls fishermen.

age of some of the disease entities included in its pages. Leukoplakia is dismissed as occurring only on the tongue. There are other such omissions. While these defects may be corrected in succeeding editions, it is not believed that the present printing can take its place beside the excellent works now available on the subject.

—Edgar Woody, M.D.

THE TREATMENT OF INJURIES TO THE NERVOUS SYSTEM, by Donald Munro, M.D., F.A.C.S., Philadelphia and London; Published by W. B. Saunders Company, 1952.

With the increase in our speed of traveling, it has become apparent that the bulk of Neurosurgery lies in the field of Trauma. As a result the majority of traumatic neurosurgical cases are first seen by the general practitioner and general surgeon. The author stresses that this book is primarily for their use and guidance.

This book is divided into 10 chapters. The first deals with the complete central nervous system. In an advisable and concise manner the author describes the general considerations with some detail, first aid measures and handling of general body functions. He describes the general pathological physiology of craniocerebral trauma and seems to stress the so-called: "Critical" lumbar puncture. He deals in some length on respiratory complication but seems to minimize the importance of tracheotomy. Suctioning a patient he considers a major surgical procedure and must not be left in the care of a nurse. His discussion on the treatment of craniocerebral trauma in all of its possible forms is excellent. He stresses clearly for the first time the surgical treatment of uncinate hernation by cutting the tentorium and reducing the herniation of the uncinate gyrus. He also discusses anesthesia in these patients and frowns on the use of the endotrachael system. A good clear cut manner of treatment of craniocerebral injuries in the newborn is outlined and expanded further.

Treatment of injuries to the spinal cord and cauda equina is gone into minute detail with all of its ramifications including the care of the G. U. Tract, the care of the bowel, the bed handling of the patient, braces and splinting, and discussion of sexual functions in both men and women with spinal cord injury.

Chapter II deals with treatment of injuries to the cranial nerves. Spinal root injuries are dealt with in Chapter III In Chapter IV peripheral nerve injuries are discussed at length, including general anatomy, surgical repair, functional return and physiothearpy. He is very meticulous in his handling of specific injuries, such as plexus injuries, injuries associated with fracture of long bones and neuromas. The treatment of the autonomic system is dealt with Chapter V. An interesting chapter is Chapter VI in which the effects of spinal anesthesia on the central nervous system is discussed. He advises exploratory laminectomy in a transverse myelitis lasting longer than 24 hours. Chapter VII describes in great detail the emergency Neurosurgical operative procedures including simple trephines, subtemporal decompression, removal of extradural and subdural clots, therapeutic section of the tentorium, debridement of compound fractures and all types of laminectomies. He also describes the procedures such as lumbar punctures, cisternal punctures, and the injection and removal of radio-opaque oils.

Chapter VIII is written by Stanwood L. Hanson, Assistant Vice-President of Liberty Mutual Insurance Company, Boston, Massachusetts. He discusses the medical cost of paraplegics and how it may be modified by rehabilitation. In 14 paralyzed patients the saving by rehabilitation was $903,000.00. Chapter IX deals with the responsibility of Hospital trustees and staff in nervous system injuries. In Chapter X the value and importance of rehabilitation is discussed.

To sum up briefly the author has presented in a detailed and concise manner every component of nervous system injury, so that it is easily available for the general surgeon and general practitioner. The presentation is excellent, the matter covered complete and the author should be highly commended.

—Louis O. J. Manganiello, M.D.

"Your Doctor" Film

The Leaphart Hospital in Jesup, Georgia, did an excellent promotional job for "Your Doctor" after arranging with the local theater manager that the film be shown. The theater obtained mats from the AMA and used them in preparation of newspaper ads and throwaways distributed about town. The hospital used one mat in a back-page spot in the newspaper regularly devoted to a hospital feature. A special showing of "Your Doctor" was arranged for the hospital staff during the August 29 lunch hour and the film was plugged on the weekly local broadcast of an AMA transcription. Two spot radio announcements were aired on the two days the film was shown, and still photos from the AMA were used in a hospital lobby display.

BOOKS RECEIVED

CARDIAC THERAPY: By Harold J. Stewart, M.D., Associate Professor of Medicine, Cornell University Medical College, New York; Attending Physician, New York Hospital; Head of Division of Cardiology, Department of Medicine, New York Hospital-Cornell Medical Center. 622 pages. New York: Paul B. Hoeber, Inc. Medical Book Department of Harper & Brothers, 1952. Price $10.00.

GYNECOLOGIC AND OBSTETRIC PATHOLOGY—With Clinical & Endocrine Relations: By Emil Novak, A.B., M.D., D.Sc. (Hon., Trinity College, Dublin; Tulane), F.A.C.S., F.R.C.O.G. (Hon). 595 pages with 630 illustrations, 19 in color. Third Edition. Philadelphia and London: W. B. Saunders Company, 1952. Price $10.00.

SURGERY AND THE ENDOCRINE SYSTEM: By James D. Hardy, M.D., F.A.C.S., Assistant Professor of Surgery, University of Tennessee Medical College. 152 pages. Philadelphia & London: W. B. Saunders Company, 1952. Price $5.00.

BRAIN SURGEON: By William Sharpe, M.D., Director of Neurosurgery, Manhattan General Hospital, New York; Consultant in Neurosurgery at Gouverneur Hospital, Jamaica City Nospital, Nassau Hospital, Mineloa, L. I.; Vassar Brothers Hospital, Poughkeepsie, N. Y.; Monmouth Memorial Hospital, Long Branch, N. J.; Ann May Hospital, Spring Lake, N. J. 271 pages. New York: The Viking Press, 1952. Price $3.75.

PARDON MY SNEEZE: By Milton Millman, M.D., Fellow American Academy of Allergists, Member American Academy of Allergy. 217 pages. San Diego, California: Fryeand Smith, Ltd. 1952.

LETTERS

1507 Saint Mary's Dr.
Waycross, Georgia
August 28, 1952

To the Editor:

Congratulations on the new MAGazine. I have read each copy with great interest. It is attractive in appearance, the news items are brief and concise. It fills a need in each busy doctor's life because to read it takes such a brief time, and yet it keeps him up on the Medical news. The wives appreciate their copies too.

Really, I think the Medical Association of Georgia is to be congratulated on all three of its publications. The Auxiliary is very proud of its Bulletin, and the new appearance of the *Journal* makes it most attractive.

Sincerely,

Mrs. Leo Smith
President-Elect

Medical Building
Thomasville, Ga.
September 17, 1952

To the Editor:

I read with interest the MAGazine of September, 1952, No. 4. I would like to suggest that one of our doctors write an article on "The Art of Medicine." I think this aspects is often overlooked in the practice of medicine. I do not mean to belittle the science of medicine—but both aspects should be considered as necessary to the patientand tend to make a more able doctor.

I don't like the term "indoctrination" of new members, as it sounds to me to possess a communistic connotation. In the rich English language, can't we find just as expressive a word—even the simple word "teach" is still good and sounds less like propaganda.

"Ignoring the Ethic Involved," which appeared in the issue of the MAGazine, deserves some further thought. We cannot and do not wish to ignore the ethics involved and fee splitting should be illegal. A great deal of my practice of 36 years was referred to me and I never had any doctor suggest or intimate splitting fees or anything to cover his expenses. I also had the pleasure of referring work to other doctors and my compensation was in knowing that there was someone who knew better how to care for the patient than myself. I am pleased to say that the problem to my knowledge has never presented itself in this area of south Georgia and north Florida.

And as a last comment, I should like to say that I believe doctors should make every effort to keep patients from unnecessary waiting.

Sincerely,

Henry M. Moore, M.D.

MISCELLANY

Dr. R. C. Major, who has been on military duty with the U. S. Army for the past two years, has been named as chairman of the Department of Surgery at the Medical College of Augusta.

Dr. K. S. Hunt, of Griffin, was awarded a Fellowship in the International College of Surgeons at their annual meeting in Chicago this September.

The American Cancer Society held their Annual Meeting September 19 in the Biltmore Hotel, Atlanta, with the Doctors' Symposium part of the program held at Emory University, Atlanta.

At its fourth annual meeting at Savannah, September 12-13, the Georgia Heart Association elected the following officers for 1952-53: President, Dr. Thomas L. Ross, Jr., Macon; President-Elect, Dr. Joseph C. Massee, Atlanta; Vice-President, Dr. Clarence C. Butler, Columbus; and Secretary, Dr. Herbert D. Tyler, Thomaston. The 1953 annual meeting will also be held at Savannah next September.

PRESS COMMENT:

Socialized Medicine

Judging by the statements of the principal candidates for the top government offices, the advocates of socialized medicine or of politically-dominated medicine haven't been doing so well.

In a general statement in which he reiterated his opposition to the centralization of power in Washington, General Eisenhower said that we must "support medical education by private means, because if we didn't it would be the first step toward the socialization of medicine, and I am against socialization."

Governor Stevenson said, "I am against the socialization of the practice of medicine as much as I would be against the socialization of my own profession, the law . . ."

Senator Nixon said, "It seems to me that the objective toward which we should work in the United States is a system where eventually anybody who wants health insurance can get it. . . . But where no one . . . is compelled to take out such insurance against his will."

Senator Sparkman said, "I would be opposed to any plan which I thought would, in effect, socialize medicine, and to any medical program which would destroy the relationship of doctor and patient."

No doubt these leaders will have more to say on the subject as the campaign progresses, as will the various Congressional candidates. But it seems certain that those who are seeking the presidency and the vice-presidency are solidly opposed to socializing medicine or making the doctor the tool of the bureaucrats. The nation can be thankful for their attitudes.

—Monroe Advertiser

In the Right Direction

According to an American Medical Association report, American hospital service last year reached an all-time high. In 6,637 registered hospitals, 18,237,118 patients were admitted—one every 1.7 seconds.

There was also a very marked gain in extending accident and health protection among the people, as measured by the accurate yardstick of premuim income. This income for accident and health insurance increased almost 28 per cent over 1950. Blue Cross, Blue Shield and similar plans reported an increase of 14 per cent. Group accident and health insurance jumped nearly 41 per cent.

What is the significance of such facts as these? They show that we are making substantial and steady progress toward solving the financial problems that come with sickness and accident. And we are doing it voluntarily, as individuals and members of organizations. We aren't doing it because the government tells us we must and taxes us to pay for it—as would be the case under Federal compulsory health insurance.

That we still have a long way to go is evident. So is the fact that we are going in the right direction. In those nations, such as England, which have attempted to solve all the problems at one fell swoop by saying "let the government do it," medical standards have dropped alarmingly and the public health has suffered. In the United States, by contrast, more people have more and better care than in any other major nation. The record speaks for itself.

—Gordon County News

THE JOURNAL
of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI NOVEMBER, 1952 NUMBER 11

Editorials

HERMAPHRODITISM

An interest in intersexuals has been evidenced since the dawn of civilization. The ancient Hebrews interpreted the first chapter of Genesis as authority for believing that Adam was the first hermaphrodite. The Greeks "protected" their society by legislating against the unfortunate hermaphrodite, but evidence of their interest can be found in Greek art, religion, and literature. And so down through history, a voluminous wealth of material has accumulated which reflects man's interest in and ignorance of this intriguing mystery. But like other scientific mysteries, the blind spots are gradually being replaced by experimental evidence; ignorance and superstition by facts instead of fiction.

It occasionally becomes the problem of every clinician to determine the sex of an infant, who as a result of anatomical aberrations, is of doubtful sex. The problem has been appreciably clarified by recent developments in genetic and hormonal experiments which make it possible to classify most individuals of doubtful sex into one of three categories. From such a classification, one is then able to categoricalize the newborn infant, and in most cases, give advice regarding the best methods of management. Whether the cause of the intersex is genetic mutations, hormonal influences acting upon the embryo through the mother, influences of the fetal testicular hormone upon feminization, or elaboration of abnormal sex hormones in the embryo is of less importance than a clear understanding of the anatomical presentation.

Perhaps the most common intersex observed is the *female pseudo-hermaphrodite*: the individual with ovaries but male development of the accessory organs. Most of these individuals reflect the influence of adrenal cortical hyperplasia which began during fetal life. The virilizing effect of the adrogenic hormone of the adrenal gland results in a deviation from the original female in in utero development. The infant is born with an enlarged phallus, varying degree of chordee and hypospadias. The urethral meatus and vagina are represented by a wide perineal opening. The adrogenic effect continues and the individual develops hirsutism, muscularity, and bony structures earlier than would be expected of a normal male of the same age. To avoid the tragedies of sex reversal or alterations at a psychologically vulnerable age, the individual should, by the age of one year, undergo examination including exploratory laporotomy to determine the diagnosis accurately. The presence of hypertrophied adrenals and female pelvic organs, combined with an elevated 17 keptosteroid and the previously described external anatomical picture, would warrant a diagnosis of female pseudo-hermaphroditism. Formerly, these individuals were converted to sterile males by plastic genital procedures. However, recent evidence indicates that the production of excessive virilizing hormones by the adrenal gland can be neutralized by the use of cortisone. Once the diagnosis and treatment has been satisfactorily established, the phallus may be partially resected. The individual should be held under observation, and the usual studies periodically performed, for one receiving cortisone over long periods of time.

The *male pseudo-hermaphrodite* is an individual having testes, but female development of the genital ducts and/or the external genitalia. The clitoris, labia, and vaginal orifice appear normal in the child, and the body development is along the expected female lines. At puberty, the breasts develop, but pubic and axillary hair are usually scant. Menses fail to appear, and frequently the patient is taken

first to the physician with the chief complaint of painful inguinal nodules. Examination reveals a vagina which ends blindly. Exploration of the inguinal contents reveal atrophic testes. Usually, no treatment is required, nor is any indicated except in those who require orchiectomy for pain. After puberty, this procedure usually results in a loss of libido with the accompanying menopausal symptoms; however, libido can be improved with estrogens.

The *true hermaphrodite* is an individual who presents both testicular and ovarian tissues. The diagnosis can be made only by gonadal biopsy. Treatment should be directed toward the sex already determined in the individual, and/or toward the appearance of the bodily form and the external genitalia. The male cases require hypospadiac repair and hysterectomy. The female cases require amputation of the phallus and vaginal plastic repair. Whichever sex is decided upon, the opposite gonadal tissues should be excised. —Peter Scardino, M.D.

YOU, *the* AMA *and the* 83rd CONGRESS

The fact that the AMA Washington Office already is rolling up its sleeves and flexing its muscles in anticipation of the 83rd Congress come January was commendably demonstrated to Georgia and Florida physicians and Auxiliary members at Jacksonville on October 15.

Sponsored by the American Medical Association and representing a joint venture on the part of the AMA Legislative Committee and Washington Office, the streamlined two-state conference was held for the specific purpose of bringing doctors up-to-date on the national legislative picture now taking shape; bills, either detrimental or beneficial to the medical profession, likely to be dropped in the hoppers next year; the activities of the AMA Washington Office; how the AMA Legislative Committee takes a stand on legislation and related matters.

In short, the meeting was thoroughly informative and productive. Intimate and in-the-family atmosphere encouraged much letting-down of hair among those present during the open-session which followed the official presentations by Dr. Frank Wilson, new AMA Washington Office Director (only recently succeeding Dr. Joe Lawrence), and Dr. Julian Price of Florence, S. C., regional member of the AMA Legislative Committee.

The usual brood of bills, hatched in the Federal Security Agency and allowing the federal government to encroach further on the private practice of medicine, will doubtlessly be reintroduced. These, of course, will include such proposals as federal aid to medical and nursing education, hospitalization for the aged, *ad infinitum* . . . all of which will require the watchful eye of organized medicine. Furthermore, the increased intensity of the Korean conflict and even greater hardships for soldiers and their dependents will afford proponents of Emergency Maternal and Infant Care programs inexhaustible propaganda.

Then, on the beneficial side, doctors' attention is called to the necessity of supporting proposed legislation calling for voluntary pension funds for physicians (and other self-employed individuals) not covered by existing pension plans which would allow deferment of tax payment on income set aside in restricted retirement funds . . . a fair and reasonable approach to the problem of permitting such self-employed to provide for their old age under today's high tax rates. This proposal was embodied in the Reed-Keogh bills (HR 8390 and 8391) introduced (but not acted on) in the dying days of the 82nd Congress. Similar bills will be introduced next year and will deserve active support on the part of the American Medical Association, the American Dental Association, and other venerable professional organizations whose numbers will be affected.

Much discussion ensued at the Conference on the International Labor Organization and the threat it poses to the so-called American way of life. The point was reiterated that physicians, in opposing the ILO, should support Senator Bricker's Senate Resolution No. 177 of the 82nd Congress, alerting their senators and representatives to the grave danger of allowing a complete socialistic economy to be imposed on the American people through ratification by the Senate of treaties approved by the ILO.

Finally, it was agreed that members of the profession must make effort to meet personally with their District Congressmen before next January. Only through friendly contact of this sort may legislators be made aware of what the people back home expect and demand of them.

AND YET THEY PRACTICE

As the law now stands, each branch of the Healing Arts has its own licensing boards which are responsible for the qualifications of its members. But we are aware of the fact that some unqualified persons are doing great damage to the profession—the fakes, the quacks and the doctors who claim easy "cure-alls"—these men without scruples who degrade the healing arts and are a threat to the public welfare.

The MAG has instructed its Committee on Legislation to explore and recommend ways to strengthen and improve the Healing Arts law. Recognizing this need for tighter control of the men already in practice, the MAG met with representatives of the State Board of Medical Examiners to find a solution to this problem.

Although the various boards are responsible for their members, they realize this lack of effective control at the present time. The reasons are: that juries often decide cases, not on the facts presented but on the personalities involved in the action; that the present shortage of medical men make certain areas reluctant to turn out unethical practitioners; and that local affiliations and connections sometimes sway a jury.

With this weakness in the jury system evident, the group came to the conclusion that if a "temporary injunction" was instituted, a judge would then decide the case on its *legal merits.*

Such an injunction would be requested by the Board of that branch of the profession in which the alleged violator serves. This type of temporary injunction is then heard by the judge in the area of malpractice. The decision of the judge in granting a permanent injunction must then be based on the law of the land—and not a decision arrived at by an unpredictable jury, prone to consider personalities and not legalities.

This conclusion serves as a solution to a real problem within the profession and just as real a problem in maintaining the health and welfare of the people of Georgia. To effect such a law is then the task of interested groups in promoting this legislation. And these interested groups need your support. An injunction law applicable to *all* the examining boards points the way to the solution of the law enforcement problem.

REMEMBER THE DAY

THE 10-13 OF MAY

Medical Association of Georgia

103rd Annual Session at Savannah

Scientific Articles

ANESTHESIA *for* PERORAL ENDOSCOPY

LESTER RUMBLE, JR., M.D., A. V. GUDE, M.D. and *W. H. GALVIN, M.D.,* Atlanta

Bronchoscopy, esophagoscopy, and laryngoscopy present two unique problems to the anesthesiologist. Foremost of these is the fact that the examinations and surgical procedures take place in the airway itself. Secondly, the respiratory system is usually the site of a disease process, rendering it more or less inefficient. A review of the literature shows a wide variance of techniques and drugs used by different authors in an attempt to provide adequate working conditions for the endoscopist, while still maintaining safety and comfort for the patient.[1 2 3 4]

Time and space do not permit a review of these techniques, for it is the purpose of this paper to outline the techniques which the authors and our associated surgeons have used and found satisfactory in over 5,000 cases, during the past five years.

Basically, our techniques center around the use of three primary agents (cocaine, pentothal and ether) and certain adjuvant drugs (procaine, curare, avertin and aminophyllin). Lest an erroneous impression develop, we will consider four groups of patients: (1) those patients between the ages of 12 and 60 years; (2) the group below 12 years; (3) those who manifest bronchospastic tendencies, including all over 60 years; (4) patients in status asthmaticus or with severe emphysema.

In the usual adult patient our basic technique is the use of local anesthesia. The patient's throat is prepared with 10 per cent cocaine. Pontocaine was used prior to this series but the sudden death of two patients in another institution deterred further use.[5] We do not attest that cocaine is less toxic than pontocaine, but we have had such satisfatcory results with the former that there has been no indication for a change.[6 7] During the first 2,000 cases cocaine 4 per cent was used, but the intensity and duration of anesthesia was not always satisfactory and reactions with the stronger solution have not been sufficiently more apparent to deter us in its usage. Recently, adrenalin has been added to the cocaine solution, and although it appears to be of advantage, sufficient cases have not been done for an adequate appraisal. It is well to stress here that the reaction of circulatory collapse seems to stem more from a true sensitivity to the drug than from the amount or concentration of the drug used. On the other hand, the reaction of central nervous system stimulation seems to stem from overdosage with the agent. Thus in cocainization of the throat, every effort is directed toward minimizing the amount of solution used. Recent "spot" measurements show that from 3 to 8 c.c. is the actual amount used in our technique. The use of the Clerf atomizer is an adjunct to the limitation of the amount of solution used.[12]

Cocainization is carried out by a superficial spray of the tongue and oropharynx, followed by the application of cocaine on cotton pledgets to the pyriform fossae. This is followed by the blind installation of 0.50 c.c. of the solution into and through the larynx. This maneuver may be repeated if a cough is not elicited on the first attempt.[8] Usually this technique provides topical anesthesia as far as the carina. The time consumed in the cocainization seldom exceeds

Read before the Section on Thoracic Diseases, One Hundred and Second Annual Session of the Medical Association of Georgia, May 14, 1952.

The statements and conclusions published by the authors are the results of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

10 minutes. This provides suffcient anesthesia for endoscopy of any sort. If an active cough reflex hniders the bronchoscopist 0.50 c.c. to 1.0 c.c. more cocaine is sprayed through the scope and is sufficient to quiet the patient. Table I shows the number of endoscopies done with this agent alone.

TABLE I

Total Cases: 5,458

September 1947 to January 1952

	Broncho-scopic	*Esophago-scopic*	*Laryngo-scopic*
Local Only	2,109	73	70
Local and Intravenous	2,056	143	21
Local, Intravenous and Curare	393	50	85
Ether Only	200	18	17
Avertin and Ether	138	10	3
Intravenous and Ether	64	7	1
	4,960	301	197

There are several points regarding the proper topical procedure which require emphasis. The presence of mucous or secretions in abnormal amounts makes the attainment of anesthesia more difficult. However, these should be wiped away before spray is begun, rather than use a large amount of solution in an attempt to obtain anesthesia. Time should be allowed after each application for the effect of the agent to manifest itself. The procedure should not be hurried. The patient is cautioned against swallowing during the cocainization. If gagging or coughing occurs the spray is stopped since the temptation is to spray more at this point, although it has little or no effect. Wherever cocaine is used we provide a 20 c.c. syringe of pentothal with needle attached, a source of oxygen and facilities for bag respiration, the means of endotracheal intubation, and a cart equipped for cardiac resuscitation.

After cocainization, a small amount of pentothal will suffice to produce narcosis for the bronchoscopic procedure. Early in the series and with each new individual bronchoscopist and anesthetist the amount of pentothal used becomes larger. As the skill of both parties increases the amount seldom exceeds 500 mg. and is usually more on the order of 250 mg. If it appears that more than this amount is to be required, relaxation is produced with 6-9 mg. of D-Tubocurare, rather than attempt to relax the patient with more pentothal.

Should stridor or laryngospasm occur as the epiglottis is lifted, the cords are sprayed with cocaine. The scope is then withdrawn to remove any stimulus from the region of the cords and used as an oral airway, until the spasm subsides. Any mucous seen in the vicinity of the cords is removed by suction. If spasm persists an oral airway is inserted, oxygen given under pressure, and anesthesia slowly deepened. This occurrence becomes less frequent as the efficiency of the anesthetist in producing local anesthesia improves, and as the skill of the endoscopist increases. Oxygen is administered through the scope throughout the procedure. The amount of curare used can be varied to produce relaxation and still maintain an effective cough, or to provide an ineffective cough if biopsy is to be taken. The effect of D-Tubo can be readily counteracted through the use of Tensilon. From the table it is seen that the use of curare is not a frequent occurrence in bronchoscopy. We have tried the use of pentothal alone and of pentothal-curare without cocainization, but the incidence of laryngospasm was such that we quickly reverted to the use of local.

The technique suffices for laryngoscopy and esophagoscopy as well. For these procedures, curare is more frequently used since the absence of an effective cough and the presence of adequate jaw relaxation is essential. Oxygen during these procedures is administered by either cheek hook or nasal catheter. This is our routine for cases between 12 and 60 years of age which do not have a "spastic" lung disease, i.e. asthma or marked emphysema.

Premedication for bronchoscopy consists of a suitable dose of barbiturate, two hours preoperatively, and a moderate dose of an opiate, one hour preop. Atropine is omitted to preclude any drying of important diagnostic secretions, or pathological secretions to be removed for therapy purposes. For esophagoscopy and laryngoscopy, atropine is given with the opiate, since secretions do not play an important role. In addition, anesthesia for these is usually more profound than for bronchoscopy. It is interesting to note here that only one death occurred under this technique. This patient was a 59-year-old colored male with suspected carcinoma of the lung. He was premedicated with nembutal gr. 1½ and codeine gr. 1, cocainized with 4 per cent cocaine and given 10 cc. of 2½ per cent pentothal with 6 mg. of D-Tubocurare. A resultant apnea was not noted until cardiac activity ceased. A neophyte bronchoscopist and a nurse anesthetist subsequently recalled that the patient had not coughed on insertion of the scope, nor at any time during the procedure. The room was darkened for the procedure and the bronchoscopist failed to note the cyanosis of the mucous lining of the tracheobronchial tree until too late. This was not a death from any of the agents used but the failure of proper observation by the team. This occurred in June 1949 and represents the last death as a result of any cause, from these types of endoscopy. The employment of a dark room was abandoned after this event.

The second, and probably most problemmatical, is that group of patients who manifest a tendency toward bronchospasm.[9] Because of the frequency of bronchospasm in older patients we include the patients over 60 years of age in this group. The technique is essentially the same as employed with other adult patients, except for several important modifications directed toward the prevention of bronchospasm. Demerol is employed in premedication rather than morphine or pantopon. Aminophyllin gr. 3¾ is given slowly intravenously

prior to throat spray. At least 300 mg. of procaine is administered intravenously before any pentothal is given. D-Tubocurare is used only in extreme necessity, since it occasionally excites bronchospasm in these individuals. This modification has been quite successful in eliminating bronchospasm and evolved after long usage of rectal ether, avertin and open ether.

In those cases of acute status asthmaticus or severe emphysema requiring endoscopy we still employ ether as the main agent. Induction is carried out with the aminophyllin, intravenous procaine and pentothal sequence, which facilitates induction immensely. Everyone is familiar with the usual struggling, time consuming, hypoxic and vigorous procedure of inducing an asthmatic with open ether. The throat is not sprayed prior to induction in these individuals, but a few minutes before the insertion of the scope, several drops of cocaine are placed in the airway and allowed to contact the cords, thereby diminishing the laryngeal component of the bronchospasm. Avertin is still used in the occasional case.

Two deaths occurred early in this series in asthmatic individuals before the value of these adjuvant agents was fully appreciated. One was a seven-year-old female who was anesthetized with ether following induction with pentothal. Bronchospasm was severe and induction stormy. Just prior to the insertion of the scope, cardiac arrest occurred and the child expired. This was in 1947 early in the period of cardiac resuscitation and this was not attempted. This was an unnecessary death since the patient lacked adequate protection from bronchospasm in the presence of an agent known to enhance it and a procedure which commonly produces it. For this reason we used avertin-ether until 1949.

Another incident occurred early in 1949 which confirmed the previous experience. An adult female with a history of severe asthma succumbed during bronchoscopy as a result of bronchospasm arising during the same combination of agents. At about this same time it was discovered that intravenous procaine would sometime break up status asthmaticus and definitely offered protection against it. Since this time we have used the procaine, aminophyllin, pentothal induction with ether maintenance for severe asthmatics without fatality, and with almost no troublesome bronchospasm.

As is noted in Table I, many endoscopies have been done under local anesthesia alone. This represents for the most part the endoscopies done on non-private cases, since the majority of private patients demand the comfort of amnesia. Although the local technique has been satisfactory, we do not feel that it offers any advantage over the technique described herein. Two deaths have occurred as a result of local anesthesia. Both patients ceased during the immediate postoperative period. The first was an unrecognized cocaine reaction, terminating in anoxia. When assistance was finally summoned by the floor nurse, it was too late for effective therapy. On the heels of this event a case of pulmonary edema, occurring in the post endoscopy period was treated as a cocaine reaction with the obvious result. Both deaths could have been prevented. With these as a background it became our practice to immediately give any patient who became the least bit apprehensive, garrulous, excited or agitated, during or after cocainization, a sleep producing dose of barbiturate, preferably pentothal.[10] This has been done in 5 per cent of the reported cases. However, this is not true indication of the development of a cocaine reaction since no attempt is made to distinguish a reaction from the development of mild hysteria or simple anxiety. For this reason alone it is impossible for us to accurately state the incidence of cocaine reactions. Neverthless, we have not had a single mortality from bronchoscopy, laryngoscopy or esophagoscopy since 1949 or in more than 3,000 cases, from any cause, anesthetic or otherwise. Prior to 1949 the occasional patient was refused bronchoscopy because of physical status.[11] Since this time no patient, moribund or otherwise, has been refused the possibility of benefit from this procedure for any reason. The age group in this series ranges from two hours of age to 91 years, with the majority of patients falling into the age group between 30 to 50 years.

The patients below 12 years of age were done under ether anesthesia. Premedication includes a barbiturate and in older children an opiate. Vinethene-ether or simply ether produces the most satisfactory working conditions in this age group. The older children are induced with pentothal, but the prolonged reaction time when this agent is used alone deters its use as the only sleep producing agent. We wish to emphasize here that 4 per cent cocaine in small amounts is used in this age group. The use of a stronger concentration or a larger amount almost invariably leads to the prodromata of cocaine toxicity. The newborn infant and child below a year of age can be managed with a few drops of 4 per cent cocaine, about 0.5 cc., since restraint of this age child is not difficult. As age increases, relaxation is desirable since edema of the cords is partially due to constant motion against the scope. A high humidity oxygen tent is mandatory for at least 24 hours post-bronchoscopy in the interest of preventing a laryngeal edema.

Two other deaths occurred in this series, not as a result of anesthesia. A 9-month-old infant underwent bronchoscopy for the removal of a splinter in the tracheobronchial tree, which had caused abscess formation. Postoperatively the patient regained consciousness but the temperature climbed rapidly to 106 degrees and the child succumbed within 12 hours to the hyperpyrexia. It was not felt that anesthesia played any role in the development of this difficulty. The bronchoscopy was performed under ether anesthesia. The other was a death as the result of uncontrollable bleeding following biopsy of a neoplastic bronchial lesion.

Summary and Conclusions

1. Over 5,000 cases of endoscopy are reported, utilizing three basic agents for anesthesia. The

deaths occurring in this group of patients (a mortality rate of 0.1 per cent in all type risks) have been briefly discussed.

2. Topical anesthesia occupies the prime position in the majority of cases. A good topical anesthesia precludes the use of large doses of intravenous barbiturate and in a large measure determines the success of the procedure.

3. The use of adequate, yet small, amounts of any topical agent cannot be over-emphasized. The development of patience in obtaining anesthesia is a prerequisite in lessening adverse reactions. It resolves itself into the thorough use of small amounts to obtain adequate topical anesthesia.

4. Absolute cooperation between the endoscopist and anesthetist is of utmost importance. Satisfactory results with the above techniques comes only after numerous cases have been done by the same team. This has been evidenced many times during this series with the arrival of each new anesthetist and each new endoscopist.

5. Extreme care must be exercised in the choice of agents for patients who manifest any tendency toward bronchial spasm. The proper use of the adjacent drugs minimizes the occurrence of this rather frightening event.

6. When the question arises that any patient may be developing a reaction to the local agent, no time should be lost in giving that patient the protection offered by a barbiturate. This requires close and continuous observation from the beginning of topical administration until the return of normal throat sensations.

7. We feel that the use of general anesthesia does not add to the morbidity or mortality rate in these procedures, if the agents are properly employed. This is indicated by the results in this reported series.

BIBLIOGRAPHY

1. Jackson, Chevalier, and Jackson, Chevalier L.: Bronchoscopy, Esophagoscopy, and Gastroscopy, ed. 3, Philadelphia, W. B. Saunders Co., 1934, pp. 76-82.
2. Moorhead, Robert L.: Symposium on Peroral Endoscopy; Anesthesia, Laryngoscope 49:1162-1164 (Dec.) 1939.
3. Benedict, Edward B.: Medical Progress; Endoscopy, New England J. Med. 226:449-455 (March 12) 1942.
4. Carabelli, A. Albert: Laryngotracheobronchial Anesthesia for Bronchoscopy and Bronchography with Pontocaine, Dis. of Chest 15:532 (May) 1949.
5. Schoen, Ferdinand: Fatal Medical Reactions to Pontocaine, Wien. Klin. Wohnschr. 52:505-511 (May 26) 1939.
6. Derbes, Vincent J., and Engelhardt, Hugo T.: Deaths Following Use of Local Anesthetics in Transcricoid Therapy; Critical Evolution, J. Lab. Clin. Med. 29:478-482 (May) 1944.
7. Thomas, J. W., and Fenton, M. M.: Fatalities and Constitutional Reactions Following the Use of Pontocaine, J. Allergy 14:145-159 (Jan.) 1943.
8. Millar, J. B., Mann, F., and Abramson, H. A.: A Method for Topical Anesthesia by Nebulization of Local Anesthetics, Dis. of Chest 16:408 (Oct.) 1949.
9. Segal, Maurice: Facts and Fancies in Management of Seriously Ill Patient with Bronchial Asthma, Dis. of Chest 14:795-823 (Nov.-Dec.) 1948.
10. Phillips, F. J., Congleton, V. L., and Tuttle, W.: Pontocaine Hydrochloride Reaction Relieved by Dial, Anesth. & Analg. 20:233-234 (July-Aug.) 1941.
11. Titche, Leon L.: Anesthesia in Tracheobronchial Procedures, Dis. of Chest, 13:452-455 (Sept.-Oct.) 1947.
12. Carabelli, A. Albert: Use of Pontocaine in Subposologic Quantities, Anesthesiology 13:169-183 (Mar.) 1952.

Selective Service Information

From the State Headquartrs, Selective Service System, comes this information to all physicians on the subject "Classification Procedure Under Universal Military Training and Service Act" dated September 15.

1. Each special registrant who has not attained the 51st anniversary of the day of his birth shall be considered by the *local board as available* for military service *until his eligibility for deferment or exemption from military service is clearly established to the satisfaction of the local board.*

2. It is recommended that those special registrants who are essential in their communities to the national health, safety and interest, present the facts in writing to their local board and request that they be placed in a deferred class.

3. There have been appointed, under provisions of Public Law 779, Medical Advisory Committees on national, state and local levels, the functions of which are to advise the Selective Service local boards concerning the essentiality of physicians and dentists. You are advised to bring to the attention of the State of Georgia Medical Advisory Committee your pending classification and request their recommendation in your case. Communications to this committee should be addressed as follows:

Dr. Carter Smith, Chm.; Dr. A. O. Lynch, Co-Chm.
State of Georgia Medical Advisory Committee of
the Selective Service System
50 Seventh St., N.E., Atlanta, Georgia.

4. All special registrants upon being examined and found to be acceptable will be offered a commission by the Armed Forces.

MAURICE F. ARNOLD, M.D. and *WILLIAM R. BAKER, M.D.*, Hawkinsville

ABDOMINAL PREGNANCY *with* SURVIVAL *of* MOTHER *and* INFANT

Full term abdominal pregnancy is a rare condition. A busy general practitioner may spend a lifetime without encountering such a case. It is said to occur once in approximately 16,000 full term pregnancies. Ware reviewed the literature from 1937 to 1947 and found reports of 249 cases during that period of time. He also added 13 cases of his own, observed on a busy university hospital obstetrical service over a 17 year period, as further evidence of the rarity of late extrauterine pregnancy. In Ware's collected series, the maternal mortality was 14.85 per cent and the fetal mortaility was 75.6 per cent.

CASE REPORT

A 28-year-old negro woman was first seen in her home, at the request of a midwife, on November 5, 1949. She had six previous pregnancies, with delivery of five full term infants uneventfully. About one year prior to this pregnancy, she had delivered a stillborn child. Her last menstrual period was "early in February." In March she complained of pain in the lower abdomen and in April there was some "spotting" for three days. She had felt all along that there was something wrong with the pregnancy and she had been to several doctors. She was told at various times that she had a "pelvic abscess," a "tumor of the womb," and that she "might be pregnant."

Physical examination revealed a well developed and well nourished, pregnant colored woman, apparently at term, and having "labor pains." Examination of the heart and lungs was negative. There was no edema or elevation of blood pressure. Fetal parts were easily palpable and the heart sounds were clearly hard just below the umbilicus. The fetal head was floating above the left pelvic brim and was freely movable. Rectal examination revealed a mass, the size of an orange, in the posterior *cul-de-sac*. Sedation, an abdominal binder, and further trial at labor were advised.

She was seen for the second time on November 7th, and was still having "labor pains" every three to four minutes. The fetal head was still above the pelvic brim and x-rays of the abdomen revealed a transverse position of the fetus. The pains stopped spontaneously and further waiting was again advised.

On November 10th the patient was seen for the third time. She was again having "labor pains" every three to four minutes. She was bleeding some vaginally and her abdomen was rigid. Vaginal examination at this time revealed no effacement or dilitation of the cervix. The fetus was still in a transverse position and the fetal heart tones were normal. At this time, the decision was made to deliver the baby by cesarean section.

Operation

Under ether anesthesia, the abdomen was opened through a low midline incision. Upon entering the prevesical fat and fascia, it was noted that large venous sinuses were present. The opening into the peritoneum also opened the amnionic sac and the fetus was found in good condition, encased in the proper membranes, lying entirely outside the uterus, which was only slightly enlarged. The baby was delivered and the cord was clamped and cut. Following delivery, there was excessive hemorrhage from partial separation of the placenta which was attached to the omentum, the sigmoid, the fundus of the uterus, the dome of the urinary bladder, and the right tube. The placental blood supply was apparently derived from all of these structures. The placenta was removed by ligating the omental attachment and those to the sigmoid, removal of a portion of the right tube, and dissecting free that part attached to the uterus and bladder. The placenta had buried itself so deeply in the bladder wall that its removal caused a large laceration in the fundus of the bladder. Hemorrhage was controlled by ligatures of zero plain catgut. The peritoneum was closed without drainage, a No. 24 mushroom catheter was inserted into the bladder for suprapubic drainage, and the fascia and skin were closed in the usual manner.

The patient was given plasma and glucose intravenously during the operation.

Postoperative Course

On the first post-operative day, she received 450 cc of whole, citrated blood, and on the second day she was given another transfusion of 375 cc. In addition, she was given intravenous glucose, penicillin, 300,000 units every 12 hours, and sedation. She became distended on the second day, but this was readily controlled by Wangensteen suction. The suprapubic tube was removed on the seventh postoperative day, and the patient was sent home by automobile on the twelfth day. Maximum temperature while in the hospital was 101.5 degrees.

The infant was a normal female who weighed 7 lbs. 9 oz. at birth. Mother and child have both been seen recently and are in excellent health.

COMMENT

The placenta in this case was removed because of the alarming hemorrhage at the sites of attachment. As a general rule, however, the placenta should be left in situ and the abdomen closed without drainage. A placenta left in the abdomen in this manner can be absorbed from the peritoneal cavity without harfmul effects.

SUMMARY

A case of full term abdominal pregnancy, with survival of both the mother and infant, is reported.

BIBLIOGRAPHY

Ware, H. H., Jr.: Observations on 13 Cases of Late Extrauterine Pregnancy, Am. J. of Obs. & Gyn., 55:561, 1948.

D. B. McRAE, M.D., McRae

FAMILIAL POLYPOSIS

This paper reviews two families representing 11 proven and five probable cases of polypsis of the colon. These 16 cases illustrate all of the important findings characteristic of the disease, as well as some of the methods of treatment used both in the past and at the present time.

Familial polyposis is a rare condition characterized by an inherited tendency of the mucosa of the colon to proliferate into polyp formation. Reviews of the history and methods of treatment up to the present are readily available in the literature and textbooks.[1,2] Suffice it to say, the first description of a true case of polyposis was made in 1861 by Luschka. In 1882 Cripps demonstrated its familial tendency by presenting a brother and sister with the condition to the London Pathological Society.[3] Eight years later Handford,[4] before this same society, called attention to the death of a young woman of carcinoma of the colon who had suffered from familial polyposis. By 1918 the relationship with carcinoma of the colon was fully established and radical surgical treatment (colectomy) advocated.[5]

Familial polyposis begins, presumably, as the result of a mutation of genes. The altered genes are then passed to succeeding generations as a mendelian dominant,[6] or as some contend, [7,8] as a recessive, or both. In the two families presented in this paper the tendency appeared as a dominant trait. There is no predilection for either sex. Although it is not considered a congenital condition and usually makes its appearance during adolescence, it may appear at a much earlier age.[9] In spite of this possibility the diagnosis of familial polyposis in children, even when several polyps are present, should be made with caution.[10]

The polyps may be sessile or pedunculated and vary in size from a few millimeters to several centimeters. Generally the larger the polyp, the greater the likelihood of malignant degeneration. Histologically, they are true polyps containing a fibrous stalk covered by epithelium continuous with the mucosa of the adjacent bowel. They may occur anywhere in the large bowel, but are more numerous in the rectum and signoid, and are similar in this respect to simple adenomatous polyps.

Symptoms arising from polyposis may be of long or short duration and usually consist of bloody, loose stools. Symptoms do not necessarily parallel the degree of involvement of the colon. After malignant degeneration has occurred the symptoms are frequently those of large bowel obstruction.

The diagnosis is made without difficulty by means of sigmoidoscopic examination. X-ray studies and the family history are also helpful. It must be differentiated from pseudopolyposis secondary to chronic inflammatory conditions of the colon.

The great importance of familial polyposis lies in the fact that all with the condition die, usually at an early age, of carcinoma of the colon. Malignant degeneration of one or several polyps may occur simultaneously and as early as 13 years of age. Usually death occurs from malignant degeneration between 30 and 50 years of age. The average age of death in the two families of this study was 34 for family No. 1 and 48 for family No 2..

The pedigrees of the two families will be shown graphically and the case histories will be given with the x-ray findings.

FAMILY NO. 1

Case No. 1—Mr. J. G., age unknown, died of cancer of the colon. No other history available.

Case No. 2—Mr. B. G., died at 37 of cancer of the colon. No other history available.

Case No. 3—Mrs. V. C., age 51, a nurse, was operated on at the Mayo Clinic 17 years ago. She is now living and well. The exact type of operation is not known, but she apparently had a colectomy with an ileosigmoidostomy.

Case No. 4—Mrs. R. H. died of cancer of the colon in 1943 at the age of 47. In 1931 she had had a segmental resection of the descending colon for carcinoma. No mention of polyposis was made in her record.

Case No. 5—Mrs. H. B. H. was seen at Mayo Clinic in 1942 with a chief complaint of passing bright blood in her stools intermittently for six years. Polyposis was found and her colon was removed in three stages down to the peritoneal reflection. She was last checked in 1949 and found in good condition; however, she died three months later while traveling abroad of undetermined cause.

Case No. 6—Mrs. L. K., white female ,age 38, para 7 gravida 7. Admitted to Duval Medical Center June 1950 with a chief complaint of bloody diarrhea of three weeks duration. Prior to this she had been entirely well except for weakness and lassitude of approximately six months duration. Physical examination was negative except for vitiligo. Sigmoidoscopic examination revealed the rectal mucosa to be studded with sessile and pedunculated polyps measuring from 3 mm. to 1.5 cm. in diameter. Biopsy of the polyps was reported as malignant but no evidence of invasion could be seen. Laboratory studies revealed a secondary anemia. Barium enema with double contrast revealed the entire colon to be involved with polyps. In August 1950 the patient had a right colectomy and in September 1950 the left colon was removed down to the peritoneal reflection and an ileosigmoidostomy done. She was discharged having two formed stools daily and symptom free. Since operation she has

Read before the Section on Surgery at the One Hundred Second Annual Session of the Medical Association of Georgia, May 13, 1952.

undergone periodic fulguration of the remaining and recurrent polyps in the rectum up to the site of the anastomosis. She has gained 25 pounds in weight.

Case No. 7—Mrs. B. G., age 35, and sister of case No. 6, was discovered to have polyposis when a survey of the family was made in 1950. She had been symptom free until December 1950, when she passed bright blood with her stools. She was operated on at the Mayo Clinic in March 1951 and had a one stage colectomy with ileosigmoidostomy.

Case No. 8—W. G., a 30-year-old white male and brother of cases 6 and 7 was discovered to have polyposis when a survey of the family was done in 1950. He had experienced no symptoms from the condition. He was operated on in Texas, but the details of the case are not yet available.

Case No. 9—D. H., age 21, died in January 1951 while in the Army, of carcinoma of the colon secondary to polyposis. He had been hospitalized for six months prior to his death with symptoms of bloody diarrhea and crampy abdominal pain. No record is available on type of surgery attempted in his case.

Case No. 10—T. H., a 36-year-old white male, brother to Cases No. 6, 7 and 8, was picked up on survey of the family and found to have diffuse polyposis of the colon. He gave a history of two bouts of bloody stools, but otherwise the history was negative. There was no sign of malignant degeneration. In February 1951 he was operated upon and the colon removed down to the peritoneal reflection and an ileosigmoidostomy done. He made an uneventful recovery and fulguration of the polyps in the remaining sigmoid and rectum is being carried out periodically.

Case No. 11—P. K., 15-year-old white female, daughter of L. K. (Case No. 6) and sister of M. K. (Case No. 12) was found to have familial polyposis on routine study of the family. She was entirely symptom free. Her polyps were more mature than those in her younger sister and had shown an increase in size and number since she was first picked up 10 months previously. Colectomy and ileosigmoidostomy was carried out. There was no evidence of malignant defeneration. Her recovery was uneventful and she is now symptom free.

Case No. 12—M. K., 14-year-old white female, daughter of L. K. (Case No. 6) and sister of P. K. (Case No. 11), was found to have asymptomatic familial polyposis on routine survey of the family. Polyps in this case were definitely less mature than in her 15-year-old sister. A one stage colectomy and ileosigmoidostomy was carried out. The polyps were found to extend about 12 cm. into the terminal ileum. She made an uneventful recovery and is now symptom free. She has two formed stools daily.

FAMILY NO. 2

Case No. 1—I. C., age 62, colored female, was admitted to Jersey City Medical Center July 21, 1945 with large bowel obstruction. On July 25, 1945 an ileo-transverse colostomy was done. At operation a carcinoma of the ascending colon with metastases was found. The patient expired four days post operatively. There was no mention in her record of the presence of polyposis.

Case No. 2—J. C., a 47-year-old colored male and son of Case No. 1 was seen in the Out-patient Clinic of the Duval Medical Center October 3, 1947 with a referring diagnosis of fistula in ano and hemorrhoids. The patient denied any gastrointestinal symptoms and there had been no bloody stools or change in his bowel habits. Proctoscopic examination revealed innumerable polyps 3 to 5 mm. in diameter in the rectum and sigmoid. Barium enema demonstrated similar involvement of the descending colon and an obstructing lesion at the transverse colon. Operation revealed an adenocarcinoma of the transverse colon with metastasis. A palliative excision was done. The patient expired six months post operatively at home and no autopsy was performed.

Case No. 3—T. C., a 43-year-old colored male, son of Case No. 1 and half brother of J. C., Case No. 2, was first seen in May 1944 with acute large bowel obstruction due to an adenocarcinoma of the rectosigmoid. Following decompression by means of a cecostomy, the lesion was excised. Positive nodes were found in the mesentery. The presence of polyps at this time was not mentionedl. The patient was lost to follow-up until December 1947, when he was picked up in a survey of the family of Case No. 2 (J. C.). Proctoscopic examination and a barium enema revealed multiple polyps of the colon, as well as an advanced and inoperable carcinoma of the rectum. The patient expired in May 1949 of carcinomatosis. No autopsy was done.

Case No. 4—I. C., approximate age 35, and brother of previous cases 2, 3, and 4, was admitted to Jersey City Medical Center December 4, 1946 with urinary obstruction, the result of recurrent carcinoma of the rectum for which he had had an abdominal resection in 1945. The patient expired December 16, 1946 of a pulmonary embolus. No reference to polyposis was seen in his record.

That patients with polyposis who are untreated or improperly treated will die of carcinoma is well borne but by this series of cases. Similarly, patients with polyposis who are treated surgically for carcinoma of the colon, and in whom segments of the colon are retained that cannot be visualized by sigmoidoscopic examination subsequently develop carcinoma in these retained segments. This was seen in two cases of this group.

Although the retention of the rectum and lower sigmoid is a definite compromise with the ideal treatment, which is total colectomy and ileostomy, the preservation of the anal sphincter is worthwhile and almost mandatory in these young individuals. Thus far this procedure has proved satisfactory and safe in this group with one patient now alive and well 17 years post operatively. Others report similar experience.[12] If for any reason adequate postoperative follow-up is impossible, or invasive carcinoma has developed, total colectomy is the indicated operation. Some writers advocate it regardless of the circumstances of the case.[11]

There is probably no other condition in which death from carcinoma can be averted as in familial polyposis. To accomplish this the treatment must be early, when the condition is found, and it must be radical in spite of the youthfulness and apparent well being of the patient; and, when the distal segment of the colon is preserved, treatment should continue in the form of periodic rechecks for fulguration of recurrent polyps for as long as the patient lives, polyps will continue to form in the retained segment.

BIBLIOGRAPHY

1. Polyposis of the Colon (A Survey of the Subject) S.G.O. 40:460-468 (April) 1925.
2. Multiple Polyposis of the Colon, Hullsiek, H.; S.G.O. 47:346-356 (September) 1928.
3. Cripps, W. H., Two Cases of Disseminated Polyposis of the Rectum, Tr. Path. Soc. London 33:165-168 (May 2) 1882.
4. Handford, H.; Tr. Path. Soc. London, 1890 XLI, 133.
5. Lockhart-Mummery, P.; The Causation and Treatment of Multiple Adenomatosis o fthe Colon, Annals of Surg. 99:178-184, 1934.
6. Dukes, C.; The Heredity Factor in Polyposis Intestini, or Multiple Adenomata, Cancer Review, 5:241-256 (April) 1930.
7. Cuptill, P.; Familial Polyposis of the Colon; Two Families, Five Cases. Surgery 22:286-304 (August) 1947.
8. Friedell, M. T. and Wakefield, E. G.; Familial Polyposis of the Colon, Journal A.M.A., Vol. 121 (March) 1943.
9. McKenney, D. C.; Multiple Polyposis of the Colon, Familial and Malignant Tendency, J.A.M.A., 107:1871-1876, 1936.
10. Kerr, J. G.; Polyposis of the Colon in Children, Am. J. Surg. 76:667-671 (December) 1948.
11. Cattell, R.; Surgical Treatment of Polyps of the Large Intestine, Am. K. Surg. 76:733-747, (December) 1948.
12. Smith, N. D. and Hill, J. R.; Treatment of multiple polyposis of the Colon, J.A.M.A. 148:440-443 (February) 1952.

ARTHUR M. KNIGHT, JR., M.D., Waycross

TEMPORAL ARTERITIS

Report of a Case with Pleocytosis and Total Blindness

This case of temporal arteritis is being reported because a careful review of the literature has failed to reveal any previous case in which pleocytosis was found. It is also thought to be the third reported case in which cortisone was used.

Temporal arteritis was first described in 1890 in England by Jonathan Hutchinson.[1] Schmidt of Copenhagen reported a case in 1930.[2] Horton, Magath, and Brown reported a series of cases from the Mayo Clinic in 1932[3] and 1934,[4] bringing the disease to the attention of physicians everywhere. By August 1951, approximately 86 cases had been reported.[5] All cases reported prior to 1948 were reviewed by Crosby and Wadsworth.[6]

Temporal arteritis (cranial arteritis) is a febrile, self-limited disease of variable duration and unknown etiology which always involves the temporal arteries and occasionally also involves other arteries.[7] Most of the reported cases have been in patients past age 55. All of the reported cases have been in the Caucasian race, and women have been affected twice as often as men. Ocular signs have been present in one-third of the cases and visual loss due to optic atrophy has occurred in approximately 15 per cent of those affected.

Pathologically, temporal arteritis is distinct from all well-known arterial disorders. It appears to be a widespread process which has been found to involve the retinal, subclavian, renal, carotid, coronary, femoral, occipital, brachial, cerebral, and other major branches of the aorta.[9,10] Microscopically, it consists (Figures 1, 2, 3, 4) of a granulomatous arteritis and periarteritis. The cellular infiltration involves all coats of the artery. Round cells and fibroblasts predominate. Giant cells (Fig. 4) are present in the media and may be numerous. The intima is involved and thrombosis occurs. Aneurysm formation does not occur. It has been suggested[11] that the name of the disease should be changed to "granulomatous arteritis of unknown cause."

Typical cases of temporal arteritis have fever, malaise, anorexia, weight loss, and weakness. The involved arteries are commonly tender, swollen, and nodular,[6] and the overlying skin may be reddened. Severe headaches occur, chiefly at night, the pain being only partially relieved by opiates.[5] Vomiting sometimes occurs. Mental confusion and even delirium have been reported.[2] Despondency and depression have been noted several times. The tem-

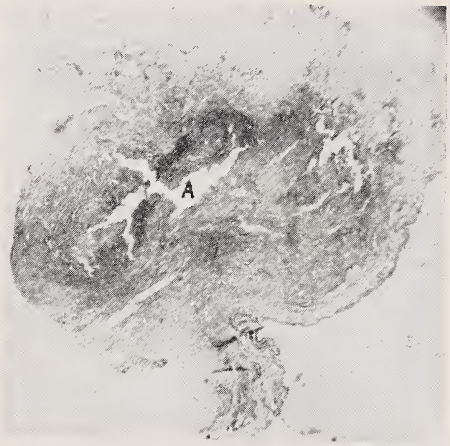


Fig. 1. Low-power (x 18) magnification of section from left temporal muscle. The inflamed and thrombosed arteriole is located in the lower left portion of the tissue. The clear space at A is an artifact due to a tear which occurred in mounting the tissue.

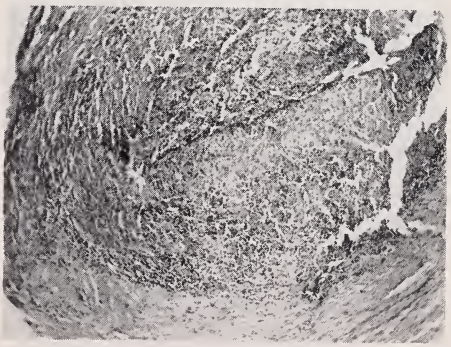


Fig. 2. Higher magnification (x 75) of the arteriole seen in Fig. 1, showing the arteritis and periarteritis, the obliterated lumen, fibrous tissue replacement, and many inflammatory cells.

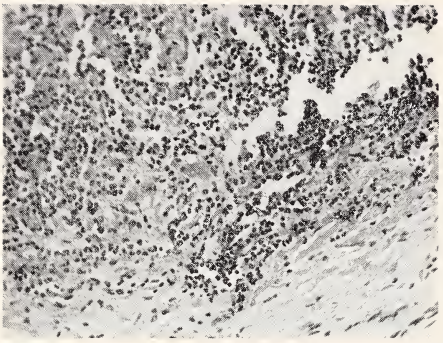


Fig. 3. Higher magnification (x 215) of the area seen in Fig. 2, showing round cells, fibroblasts, and giant cells.

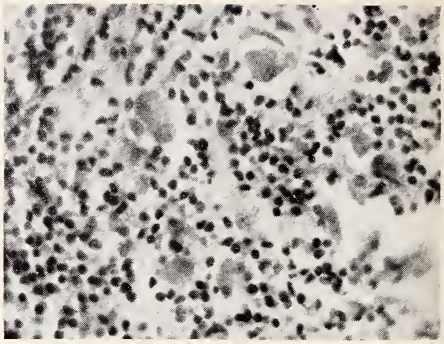


Fig. 4. Still higher magnification (x 475) to show the giant cells which occur in temporal arteritis.

poral arterial swelling may be bilateral, and the occipital arteries are often involved. Chewing causes pain in the temporalis muscle. A moderate to severe hypochromic anemia is often present. The leukocyte count varies from 7,500 to 15,000 with an increase in the proportion of polymorphonuclears.[7] The sedimentation rate is usually elevated.[5] The eyes become involved in less than half of the cases, and half of those whose eyes become involved can expect to lose their sight permanently in one or both eyes.[2]

Treatment has been unsatisfactory in most cases. Section of the involved vessels often gives dramatic relief from pain, presumably by interrupting the periarterial sensory nerve supply. Immediate and striking relief of headache has also been reported as a result of procaine block of the sympathetic nerve fibers passing along the vessels.[12,16] Antibiotics have been disappointing. Cortisone has been previously reported in two cases to give prompt relief from the local and systemic symptoms.[13] Another case has been reported in which ACTH was used with dramatic response.[5]

Bain[14] reported a case which recovered in only one month, while Cooke and others[10] had a case which ended in death 30 months after onset. The average case may be expected to last for several months. Less than half of the cases will develop partial to total blindness. It is impossible to estimate the mortality rate because many cases undoubtedly occur which remain undiagnosed or unreported.

The method of involvement of the eye has been classified by Bruce[2] as follows: occlusion of artery (18 per cent), ischemic retrobulbar neuritis (38 per cent), and "indeterminate" (44 per cent). The last category includes unexplained loss of vision, subretinal hemorrhage, retinal phlebitis, photophobia, generalized narrowing of the arteries, periarterial sheathing and macular exudate, pressure of intracranial aneurysm, and a case in which the patient also had cataracts and glaucoma. Of the recorded cases in which the eyes have been involved, sequelae have included blindness in both eyes (38 per cent), blindness in one eye (27 per cent), various degrees of impairment (20 per cent), presumable recovery (5 per cent), and "uncertain" (8 per cent).

In a comparative study with periarteritis nodosa, Gordon and Thurber[15] concluded that similarities exist but that important differences occur in the distribution of the lesions, the sex and age groups involved, and the mortality rates of the two diseases. Both go through destructive and reparative phases, and histologic changes similar to those found in temporal arteritis can be seen in periarteritis nodosa. The latter, however, is panarteritis predominantly of the visceral arteries, while the former is panarteritis predominantly of the aorta and its peripheral branches. Periarteritis nodosa may occur at any age,[7] whereas temporal arteritis tends to occur after age 55. There is generalized involvement in periarteritis, often with serial involvement of one set of arteries of the body after another, and veins also may be involved. Temporal arteritis, on the other hand, may be sharply localized to the cranial arteries. Involvement of the cranial arteries alone is rare in periarteritis nodosa. Eosinophilia occurs in 16 per cent to 20 per cent of cases of periarteritis nodosa, whereas it is rare or absent in cranial arteritis. Periarteritis nodosa is usually fatal, whereas the prognosis for life is good in temporal arteritis.[7]

CASE REPORT

A 72-year-old white widow was first seen by the writer on May 9, 1952, complaining of blindness, weakness, loss of appetite, pains in the head, shoulders, and neck, tenderness and hyperesthesia of the left scalp, difficulty in swallowing, pains in the temples on chewing, and attacks of faintness. She began to feel ill in December, 1951, tiring very easily and sleeping more than usual. On February 19, 1952, she developed "influenza," and since that date she had grown progressively weaker, feeling worst in the morning and remain-

ing in bed until noon. During these weeks, she had generalized rheumatic pains, with aching and slight stiffness of the joints, especially the knees. In March a "vein" on the left temple "stood out" and was painful, and she had a severe left-sided headache. One day she had severe pain in both temporo-mandibular joints when she attempted to open her mouth.

Since the onset, she had had rheumatic pain in the back of the neck which was inconstant, dull and aching in quality, and extended down into the lower portion of the trapezius muscle. The neck had not been stiff. There were "sore spots" all over the head, and she was unable to chew solid food because of pain in the temporal muscles. She said the act of swallowing "tired" her pharyngeal muscles. Her appetite had been very poor for two months.

Members of her family stated that the temporal arteries had been slightly swollen and very tender. Subjectively, the pain in the head always felt like it was outside the cranium, except for occasional pain behind the eyes. There had been no pulsating or throbbing type of pain except when the arteries were most swollen. The upper half of her head had felt "heavy," and she had had "sore spots" and "long tender streaks" or "tender ridges" in her scalp.

She first noticed eye symptoms about two weeks before she was seen by the writer, at least two months after the onset of her illness. The first symptom was a feeling "that the eyes needed to be wiped all the time." An ophthalmologist was consulted and she was told that he could find nothing abnormal in her eye examination. On the fourth day, a shadow appeared before the right eye, which was totally blind by the fifth day. The left visual field gradually contracted for about a week, after which she was totally blind. During this time she experienced pain if she turned her eyes to either side.

Though all of her teeth were extracted many years before, her lower jaw ached severely when the head pain began, and the anterior neck and submental region had felt "swollen." She had some night sweats while having the rheumatism. There had been much fatigue and slight ankle edema. She and her family thought she had been running a low-grade fever, but her temperature had not been taken. She had been very thirsty in the daytime and had had nocturia two or three times each night. She was somnolent during the day and slept well at night. Her family reported that she had been quite depressed.

The family history was positive for migraine, hypertension, and coronary arteriosclerotic heart disease.

She had been married twice but had never been pregnant. Between ages 14 and 19 years her hands would swell and "get hard" when she put them into cold water. This was accompanied by urticarial wheals on the back. She had always been unable to tolerate aspirin, which caused swelling, pain, and "bloating" of her abdomen. She had taken a lot of Anacin(R) in the present illness, as well as sulfonamide tablets, aureomycin, terramycin, and penicillin. She had never had many headaches in her life and no attacks of migraine.

Physical examination revealed a normal temperature, pulse rate, and respiratory rate. The blood pressure was 110/60, and she was 60.5 inches (153.67 cm.) tall and weighed 106.5 lbs. (48.38 Kg.) She was thin, obviously totally blind, and appeared chronically ill. Her pupils were dilated and did not react to light or accommodation. The globes were tender to pressure but there was no apparent increase in the intraocular pressure. The right optic disc was pale and a small flame-shaped hemorrhage was noted adjacent to a branch of the inferior nasal artery. The left disc was slightly edematous and a small hemorrhage was noted on the disc. Another small linear hemorrhage was noted on a branch of the superior temporal artery. A few small, soft, yellow exudates were sparsely scattered throughout both retinas. Sclerosis of the arterioles was graded II.

Several branches of the temporal and occipital arteries could be palpated as tender, hard, fibrous, pulseless, subcutaneous cords, but there was little if any gross swelling, nodularity, or redness remaining (Figure 5). The pharyngeal reflex was present and no paralysis of the pharynx could be demonstrated. Various muscle groups were slightly tender, notably in the left axilla, on the anterior chest wall, and in the left loin. The heart and lungs were negative. Visible pulsation of the brachial arerties was noted. Neurological examination was negative except for the eyes. The left posterior tibial pulse was very feeble at the medial malleolus.

Laboratory studies revealed the following: R.B.C. 3,000,000, hemoglobin 8.5 Gm., W.B.C. 13,500, polymorphonuclears 71 per cent, lymphocytes 23 per cent, eosinophiles 4 per cent, basophiles 1 per cent, monocytes 1 per cent, sedimentation rate 115 (Westergren), hematocrit 25 per cent, icterus index 2. There was no free HCl in the fasting gastric juice but 50 clinical units of free acid was present after injection of histamine. Fasting blood sugar was 110, B.U.N. 14, total cholesterol 151, and calcium 9.6 mg. per cent. The urine was negative for albumin and reducing substances, with a specific gravity of 1.020 and a reaction of pH 5.5. There were 10 to 12 W.B.C. per high-power field and the smear revealed Gram-positive cocci. Tuberculin skin test (1.0 mg.) was negative. The cerebrospinal fluid pressure was 150 mm. of water, cell count 124 lymphocytes, glucose 79, and protein 44 mg. per cent. Smears and cultures were negative. Pandy and Ross-Jones tests were negative, and the colloidal mastic test gave only a one-plus reaction in the first two tubes. Blood and cerebrospinal fluid serological tests for syphilis were negative. The basal metabolic rate was minus 30 per cent.

The chest x-ray film was reported negative. Skull films were negative except for hyperostosis frontalis interna. The electrocardiogram revealed somewhat slurred QRS complexes and widening of the angle between the mean spatial QRS and T vectors. Bone marrow smears showed a cellular marrow with no abnormal cells and hypochromic erythrocytes (Fig. 6).

On May 13, 1952, a biopsy of the left temporalis muscle was done (Figure 7). Microscopic sections of this tissue revealed arteritis and periarteritis (Figs. 1, 2, 3). The inflammatory reaction involved all of the coats of the vessels. The lumina were obliterated and replaced by fibrous tissue and many inflammatory cells. Attempts at re-canalization were noted. An occasional giant cell (Fig. 4) was seen. These findings were considered by the pathologist to be characteristic of temporal arteritis.

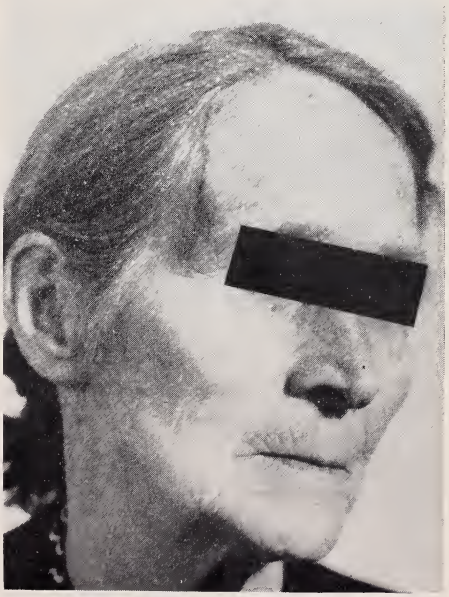


Fig. 5. Photograph of the patient before cortisone therapy was begun. The temporal artery was not prominent and was shaded with a skin pencil to make it visible.

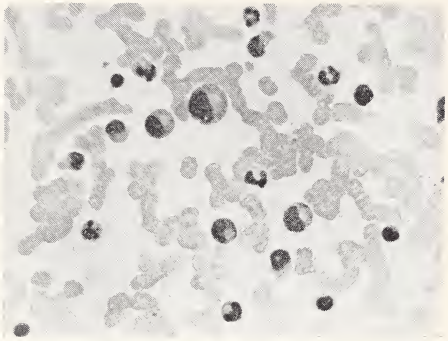


Fig. 6. Bone marrow smear (x 450) to show hypochromic erythrocytes and absence of abnormal cells.



Fig. 7. The biopsy site can be seen. Note that the temporal artery was not prominent at the time that blindness occurred.

On May 12 and again on May 13 she was given 500 c.c. of whole blood intravenously. Penicillin was given for the urinary tract infection and there were no pus cells in the urine after four days. The edema of the left optic disc gradually subsided, and both discs remained pale yellow. The retinal arterioles appeared to become still more narrow, and many branches seemed to disappear. She continued to complain of dryness of the mouth, weakness, nervousness, pains in the legs, neck, head, and shoulders, anorexia, and dysphagia. There was no fever.

On May 31, 1952, she was started on 100 mg. of cortisone acetate intramuscularly every 24 hours. Certain of her symptoms and complaints improved very promptly; namely, the appetite, the ability to swallow, the rheumatic pains, and the depression, but she continued to have many other complaints. The arteries of the head ceased to be prominent and seemed to "melt away." The tenderness on deep palpation in the temples subsided very slowly and was not entirely gone after two months on cortisone. There was no more weight loss but neither was there any weight gain other than what might be attributed to salt and water retention from cortisone. Headaches were much less frequent and less severe, as well as different in quality, being described as aching behind the eyes and "heaviness" in the vertex. Chewing was no longer painful after a few days on cortisone. She improved greatly in strength and was able to walk about without support after a few days, but her strength fluctuated, and she was walking with a cane after two months. The "rheumatic" pains in the neck, shoulders, and legs continued for the entire two months, but were less severe while she was on cortisone. She continued to be very sleepy in the daytime and was unable to sleep at night. The somnolence in the afternoon was so marked that she would fall asleep while talking to members of her family. At night, however, she would wake up and feel very nervous, restless, anxious, and almost panicky.

After two weeks on cortisone, her cerebrospinal fluid cell count was zero. The protein level was 24 mg. per cent and the Pandy and Ross-Jones tests were negative. The cerebrospinal fluid glucose level was 105 at a time when the blood sugar level was 150 mg. per cent (post-prandial). Urinalysis was negative. The hemoglobin level was 10.10 Gm., W.B.C. 10,080, hematocrit 34 per cent, sedimentation rate (Wintrobe) 34, icterus index 5.

During the two months that she was maintained on cortisone before this communication was written, she continued to have many complaints, which included the following: dryness of the mouth, weakness, nervousness, pains in the backs of the legs, back of neck, and shoulders, fullness in head, "sensation like a heavy pot pressed down on top of the head," "band around the head," heavy head, heavy throbbing in head and chest, pain in left eye, dull ache above left eye, aching behind eyes, lacrimation, fullness in chest, pains in sternum, a dull, heavy ache which begins in right neck and moves down into left chest, pulse heavy and hard in neck and chest, heavy feeling in chest, heavy arms, heavy beating of pulse in left arm, numbness of 4th and 5th fingers of both hands, burning of the feet, burning and tightness of the toes, "wobbly and tottery" legs, legs and ankles weak and shaky, tightness behind left knee and in left calf, fear of being alone, lapses of memory, constipation, "gas," trouble keeping warm, "creaking" of neck. These numerous complaints varied from week to week. They increased in number and severity when an attempt was made to withdraw the cortisone.

Physical examination on July 26, 1952, revealed very few changes. She now had a vertical nystagmus. There were no new changes in the optic fundi. Some tenderness remained in the left temple. The knee-jerks were hyperactive bilaterally but the abdominal reflexes were normal. Her weight was 106.5 lbs. (43.38 Kg.).

Comment

This case illustrates the fact that temporal arteritis may be a chronic systemic disease which is not limited to the temporal arteries. It also focusses attention on the difficulty one may have in distinguishing pains and discomfort of physical origin from those of psychogenic origin in an individual with progressive cerebral arterial disease. The lymphocytes in the cerebrospinal fluid might well have come from the inflamed periarterial tissues of vessels traversing the subarachnoid space. Cortisone seemed to be of some symptomatic benefit, though it did not control all of the symptoms in the dosage used.

Summary

A case of temporal arteritis is described in which the patient had an increased cerebrospinal fluid lymphocyte count. The literature on this disease is

briefly reviewed. The patient was treated with cortisone which gave only partial relief from the symptoms. This case appears to illustrate the possibility that temporal arteritis may be a widespread, chronic, progressive, systemic disease.

BIBLIOGRAPHY

1. Hutchinson, Jonathan, Archives of Surgery (London), 1:323-329 (April) 1890.
2. Bruce, Gordon M., American Journal of Ophthalmology, vol. 33, No. 10, pp. 1568-1573 (Oct.) 1950.
3. Horton, B. T., Magath, T. B., and Brown, G. E., Proceedings of Staff Meetings of Mayo Clinic, 7:700 (Dec. 7) 1932.
4. ————: Archives of Internal Medicine, 53:400 (March) 1934.
5. Tate, W. M., and Wheeler, J. A., Journal of the Kansas Medical Society, vol. LII, No. 8, pp. 374-377 (Aug.) 1951.
6. Crosby, R. C., and Wadsworth, Richard C., Archives of Internal Medicine, vol. 81, No. 4, pp. 431-464 (April) 1948.
7. Wright, Irving S., Vascular Diseases in Clinical Practice, Year Book Publishers, Inc., Chicago, 1948, pp. 248-255.
8. Anderson, W. B., Nicholson, W. M., and Iverson, L., Southern Medical Journal, May 1948, vol. 41, No. 5, pp. 426-434 (May) 1948.
9. Sproul, E. E., New York State Journal of Medicine, vol. 42.4, pp. 345-346 (Feb.) 1946.
10. Cooke, W. T., Cloake, P. C. P., Govan, A. D. T., and Colbeck, J. C.: Quarterly Journal of Medicine, 15:47-76 (Jan.) 1946.
11. Dantes, D. A., Journal of the American Medical Association, 131:1265-1269 (Aug. 17) 1946.
12. Roberts, A. M., and Askey, J. M., Journal of the American Medical Association, 137:697-699 (June 19) 1948.
13. Schick, R. M., Baggenstoss, A. H., and Polley, Howard F., Proceedings of Staff Meetings of Mayo Clinic, 25:135 (Mar. 15) 1950.
14. Bain, C. W. C.: Lancet 1:517 (Feb. 26) 1938.
15. Gordon, L. Z., and Thurber, D. C., Archives of Pathology, 42:402-411 (Oct.) 1946.
16. Turner, J. L., and Van Horn, P. R., Journal of the American Medical Association, 149:826-828 (June 28) 1952.

Regional Conference on National Legislation

A Regional Conference on National Legislation was held in Jacksonville, Fla., October 15, 1952.

Present at this meeting were representatives of the American Medical Association, Dr. Frank E. Wilson, Washington, D. C., Dr. Julian Price of Columbia, S. C., and Col. James Forrestal of Washington. There were also representatives from the Georgia and Florida Medical Associations and Auxiliary members from both Associations.

Dr. Frank Wilson, Director of the American Medical Association, gave a brief outline of the function and activities of the Washington office. He explained the workings of the Washington office, which is composed of an office force of 17 people, three physicians, two editors, a public relations and business manager, secretary and stenographer. He said they had 70,000 on the mailing list for the Weekly Bulletin. He stated that Oscar Ewing complimented the efficient manner in which matters were handled in the office of the A.M.A.

Dr. Wilson also discussed the pros and cons of the Margis Sharon letters. He told how the two lobbyists, Drs. Wilson and Maxwell functioned and gave an explanation of membership and function of the Committee on Legislation.

Next, we had a brief summary of Congressional activity on bills before the last Congress. Col. Forrestal discussed the old HR—Bill 7800, concerning Social Security diagnosis of total disability. This section should be ineffective after July 3, 1953.

Hospitalization for the aged and the Reed-Keough Bill, which permits doctors and other self-employed persons to set aside money each year for an annuity tax free, were discussed by Dr. Wilson.

Dr. Wilson said the International Labor Organization was a greater threat to us than Oscar Ewing. Various bills sponsoring Federal Aid to Education have been proposed and must be watched closely, as most of these bills give too much authority to the Federal Government over the Educational Institutions of our States.

The Nurses Bill and also the Emergency Maternal and Infant Care and Federal Aid to Public Health Units No. 455 did not get out of the committee. The American Medical Association opposed it. Dr. Wilson said that the Public Health was getting into Socialized Medicine when they get into Therapy rather than preventative medicine.

The International Labor Organization which is a great threat to Organized Medicine, began in 1949 in conjunction with the League of Nations and was hooked up later with the United Nations. Their meeting in Geneva last year approved a convention on minimum standards of Social Security in nine fields. Fifty-nine nations sent representatives to these conventions. Each nation has two representatives. The Medical Care Field is one of the most dangerous threats of the International Labor Organization to Organized Medicine.

Dr. Wilson is very desirous of every Medical Man getting thoroughly versed on the history, purpose, and plans of the International Labor Organization. A clear and concise description of this Organization will be found in the American Medical Association Journal of August 23, 1952. It is suggested that you read this article.

The meeting in Jacksonville, while a short meeting, was very timely and instructive to all attending.

SPENCER A. KIRKLAND, M.D., Chairman,
Committee on Public Policy and Legislation,
Medical Association of Georgia.

DON F. CATHCART, M.D., Atlanta

Acute HEMORRHAGIC NEPHRITIS *in* CHILDREN

The etiological factors of acute hemorrhagic nephritis, both extrinsic and intrinsic, are at this time somewhat ill defined. It is not the purpose of this paper to discuss these factors, but rather to present simple procedures in handling the disease, once diagnosed. Certainly the disease is one well known and treated by all of us in all of its ramifications, but it would seem to me that it is either on the increase statistically or it is being diagnosed more frequently.

The disease is the most common form of nephritis seen in childhood and is reported to be more common in males. The literature states that it is a one to two per cent complication of scarlet fever, which may not be doubted, but in recent years only two cases have been encountered in my practice. Twenty-one cases of relatively mild Scarletina were seen and followed closely during the past winter and spring, and none of these developed nephritis. The great majority of the cases of nephritis that have been observed have been traceable to an infection of the upper respiratory tract, but there is no reasonable explanation for this phenomena. The causitive organisms do not invade the kidneys and toxins have never been held responsible for the kidney damage. The coccal group of organisms including the hemolytic streptococcus, the pneumococcus and occasionally the staphylococcus are certainly accused, but the disease occurs so infrequently in children with diseases caused by these organisms, that it would lead us to believe that there is some other factor involved which is yet to be discovered.

The clinical picture of this disease may vary widely, but in the small series of cases I am reporting, the symptom complex and laboratory findings are very similar and assume somewhat the form of a mild epidemic entity. The typical history invariably tells of a one or two day bout with fever, cold or sore throat in from 12 to 20 days prior to the appearance of smoky or bloody urine. Rarely the family will notice some puffiness around the eyes, and still more rarely an unusual gain in weight. It is quite true that the disease may have a very abrupt, febrile onset, but in the great majority of cases it develops slowly, and one becomes aware of the condition only when the urine is noted to be dark or smoky.

On examination these children present very little to suggest the seriousness of their ailment. The temperature may range from normal to 102 degrees and rarely is higher. Evidence of an acute upper respiratory infection may still be present as a subsiding element, and there may be malaise, vomiting or other gastrointestinal disturbance. Upon closer questioning it is usually ascertained that urination has decreased in volume as well as frequency, and in many girls there may be history of burning, probably due to concentration and hyperacidity. In any case of hematuria, blood pressure determinations are very important and in the great majority of the cases of acute nephritis the pressure will be elevated. As a general rule this elevation is found in the early stages of the disease, but it may vary widely from day to day or even during the day, but in the uncomplicated cases the blood pressure is usually normal in from seven to 10 days. Marked renal damage may cause a persistent elevation of blood pressure and in those cases progressing to chronic nephritis, there may be a persistent and permanent elevation.

In presenting these six cases of acute hemorrhagic nephritis, I wish to call your attention to the marked similarity of onset, symptom complex, course and recovery. These children evidenced their first signs and symptoms within one month of each other and all were followed clinically and from the laboratory standpoint for over six months. Strangely enough all patients lived within an area of about one and a half square miles which certainly facilitated their being examined frequently. During the first two weeks of their illness they were

Read before the Section on Pediatrics at the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 12, 1952.

seen three times weekly. Blood pressures were taken, physical examinations checked and a careful weight chart was kept. Urine specimens were examined twice weekly. The same procedures were followed during the second two weeks and at the end of one month, blood sedimentation rates were determined and in all cases was found to be moderate to markedly active. During the second month of treatment, urine examinations were made weekly and the children were seen weekly. At the end of the second month, blood sedimentation rates were determined and in every case was found to be normal.

The history in these six cases revealed an upper respiratory infection 12 to 20 days prior to their onset with hematuria. Two of the children were seen with this premonitory finding and were given sulfadiazine and cleared very rapidly. Four of them were not seen, but were treated sympomatically and cleared equally as rapid. Hematuria appeared as the presenting sign in every case and the early urine examinations revealed from three to four plus albumin, red and white cells, fine and coarse granular casts present. General physical examination in five of these children was not remarkable and certainly did not indicate the serious possibilities of the disease. Two of them did not have fever and hardly gave any indication of being ill. The temperature in the other four ranged from 101 to 103 degrees, but rapidly dropped to normal with appropriate care. In three cases there was definte facial edema and in one pitting edema of the ankles. This latter child was the sickest in the group and was hospitalized.

Five of the children showed a mild elevation of blood pressure and one a pressure of 160 over 90, but in every case the blood pressure came to normal and persisted in seven days or under. One child showed a mildly red throat and nasal discharge on first being examined, but had no fever, therefore none of them had findings of an acute focus of infection at the time of hematuria or presenting finding. The children who had fever naturally had an accellerated heart rate, but there were no murmurs heard and not once in the course of the disease did any child show evidence of cardiac failure.

As has been stated, weight charts were kept on all patients and presented interesting data. The three children who did not have any demonstrable edema lost from three to six pounds during the first week of their illness and then remained more or less stationary for the following six weeks. One child with facial edema actually lost nine pounds in the first five days of her illness and four pounds the following nine days. The mother of this child stated that she had thought the girl was looking so well and certainly was getting "plump." The two remaining cases showed a gradual weight loss of five and 10 pounds respectively over a two week period and then became static.

In treating acute hemorrhagic nephritis it has been my experience that the greatest difficulty encountered is in convincing the family of the grave seriousness of the disease. This fact must be stressed over and over again if results are to be obtained. Extreme strictness should prevail in all instructions for nursing care and any laxity should certainly be discouraged. It is far better to err in the prolongation of bed rest and care, in contradistinction to "lackadaisical" handling of this disease. In speaking of the treatment of the disease I am naturally referring to absolute bed rest, which is about all that we have to offer in the uncomplicated case. There is much that we can do for the complications of acute hemorrhagic nephritis, but in general, excellent results will be gotten if rest is adhered to for some time following clinical cure. It is my feeling that television is the finest adjunct to the treatment of the disease that has been discovered during the past 50 years.

To be more specific in regard to treatment only one child received an antibiotic and in this case 300,000 units of penicillin was given intramuscularly on the first day of the hematuria and this occurred during my absence from the city. It is my opinion that the damage has been done when the condition is diagnosed and that antibiotics play no part in the cure of those cases in which they are used. Should some intercurrent infection occur, then certainly the appropriate drug should be administered.

In this series, those children who had edema had some restriction of fluid intake until edema disappeared and then were given normal amounts. Those children who had fever naturally were put on a light diet, but in no instance was salt absolutely restricted nor were the proteins in the diet increased to any great extent. Highly seasoned foods, condiments and such were restricted. Empiracally these children received from 200-300 mg. of ascorbic acid daily and during their convalescence were given vitamins and iron.

In regard to the administration of ascorbic acid, you will recall that following the isolation and identification of vitamin C in 1932, many reports were made, particularly from Europe, on the effectiveness of vitamin C in clearing the hematuria found in acute hemorrhagic nephritis. Murphy and others in this country were prompted to advocate its use routinely in treating this disease, but as time and experimental work went on, Parsons, Abt, Wilbur and others went on record that there is no real proof that vitamin C was of any value. Miller, Johnston and Hayman of Western Reserve University, studied six cases in 1942, all treated with large doses of vitamin C and found hematuria and albuminuria not affected. In 1951 Howatt and Davey, of Queens University, Canada, produced the prototype of acute hemorrhagic nephritis in 16 rabbits by the injection of bovine gamma globulin. These rabbits were treated with massive doses of ascorbic acid and in no case was there improvement or cure.

Despite the fact that there is very little if any evidence of vitamin C effectiveness in this disease, it can certainly do no harm and may play some part in

affecting the permeability of the renal capillaries as well as hasten the healing of the damaged kidneys. The fact that these six patients cleared completely and without complication or sequele would suggest that they were given the opportunity of correct care and treatment. It is a very interesting fact that once a child recovers completely from acute hemorrhagic nephritis, that it is extremely rare for a second attack to occur. My records will show that every child in this series had one or more attacks of some type of upper respiratory disease during this past winter. They were watched very carefully, urine examinations were done and in no case was there a suggestion of recurrence.

REPORT OF CASES

Case 1. S. K., boy, aged 6. History of one day fever 14 days prior to appearance of smoky urine. When seen had slight puffiness around eyes, blood pressure 110/70, temperature normal and no evidence of focus of infection. Urine showed white and red cells, hyaline and fine granular casts. Bed rest for two months, supportive treatment, cleared without complication. Urine negative four months after onset.

Case 2. F. L., girl, aged 10. History of sore throat and fever for two days prior to complaint of burning on urinating and one day later the appearance of blood in the urine. Very little evidence of edema present and blood pressure only slightly elevated. Weight loss of six pounds during first 10 days of illness. Bed rest for two months and at the end of four months had a negative urine.

Case 3. D. G., girl, aged 8. This child gave a history of a cold and cough two weeks before onset. She had fever for three days before the appearance of grossly bloody urine. When seen there was a definite facial edema, pitting edema of the ankles, temperature of 103 and blood pressure of 160/90. She seemed to be somewhat disorientated, quite ill and was hospitalized. The urine showed blood and pus cells, fine and coarse granular casts and the NPN was 46 mg. per cent. She was given five 6 cc. intramuscular injections of 50 per cent Mgso4 and the blood pressure came rapidly to normal in a period of about 72 hours. Her temperature dropped to 100 in 48 hours and gradually became normal. She weighed 72 pounds on admission to the hospital and at the time of dismissal eight days later she weighed 62 pounds, a loss of 10 pounds. The treatment consisting of bed rest and supportive measures was continued at home for two months and by the end of this time she had recovered. The urine was examined periodically and did not clear microscopically for 6 months.

Case 4. A. C., girl, aged 7. This child gave the usual history of sore throat with slight fever about 12 days before onset with hematuria. She was seen at this time and given glucosulfadiazine for 48 hours in five grain doses every four hours. She apparently cleared completely. When seen in the home the day following the hematuria she had moderate facial edema, no fever and only a very slight elevation of blood pressure. She had received one injection of penicillin (300,000 units) the day hematuria appeared. This child felt extremely well and it was somewhat difficult to keep her as quiet as desired. According to the scales, this child lost nine pounds during the first five days of bed rest and four pounds the succeeding nine days. After one month's rest in bed, the urine was clearing nicely, the weight was static and the sedimentation rate was only slightly active. She was taken to the seacoast by automobile and her treatment continued under a physician's care. Upon her return the sedimentation rate was normal, the urine was negative, and she was clinically cured.

Cases 5 and 6. R. M. and M. J., aged 5 and 7, both girls. These children developed hematuria two weeks following a respiratory infection with very little if any fever. They both followed a very typical course of mild hemorrhagic nephritis and at the end of two months bed rest had normal sedimentation rates, essentially negative urines and were clinically well.

SUMMARY

Six cases of children suffering with acute hemorrhagic nephritis are presented. The disease occurred in five girls and one boy, ranging in age from five to 10 years. The similarity of onset, course, care and cure has been stressed. All cases were followed clinically and from the laboratory standpoint from three to six months and there were no complications or sequel. During the past winter these children all had one or more mild respiratory infections with fever and in no instance has there been a recurrence of nephritis.

DISCUSSION

DR. PHILIP A. MULHERIN (Augusta): In discussing this paper I would like to emhpasize two or three points. I notice a good many general practitioners present, and for their benefit, I might state that the chief error made in handling these patients, is in the prognosis. You should explain emphatically in the beginning to the parents, that the child will probably recover, but it will be a matter of three to six months, most of which time is to be spent in bed. Rest, and plenty of it, is our best single therapeutic weapon. Dr. Cathcart is probably quite right about no specific antibiotic or chemotherapy being indicated, but I feel better giving penicillin for the first four or five days, either orally or parenterally. Finally, I should like to emphasize Dr. Cathcart's point about the elevated sedimentation rate. We spare them the expense of doing it in the beginning, because it is always elevated, but as clinical convalescence approaches, we do it, and do not let up on the rest regimen until it is normal and remains so for two weeks.

PRESS COMMENT: *A Fitting Tribute*

On Tuesday night, citizens of this section will assemble at the Community House to pay tribute to a man who has devoted the major part of his life to the people of this section.

We refer to Dr. T. H. Brabson, well-known and beloved physician, who will be awarded a plaque and citation by the Woodmen of the World Camp in ceremonies recognizing his long service.

A doctor who chooses to spend a lifetime in a rural area as a general practitioner instead of specializing in one phase of medical science, deserves to be recognized.

Dr. Brabson would undoubtedly have led a much easier life as a city specialist.

However, in spite of the difficulties encountered in a rural practice, we know Dr. Brabson can look back on his years of service here with no regrets.

It would be impossible to measure what this outstanding physician has meant to the people of this area over the past 40 years. Service such as he has given cannot be measured by any scale man has devised.

We join with the Woodmen in paying tribute to a man who, by his devotion to duty, has earned the love and respect of everyone.

—NORTHEAST GEORGIAN

OTITIS EXTERNA

Etiology and Treatment

PAUL LUCAS, M.D., Tifton

Infection of the external auditory meatus, cartilaginous and osseous, is of general interest because of its prevalence in South Georgia and because most physicians, at one time or another, are asked to treat this painful disease. The layman's term for otitis externa varies from "boils in the ear" to "fungus ears," the latter term being more frequently used by both the laity and physicians. The recent literature, however, suggests a bacterial rather than a fungous origin. In a review of the subject, Gill[1] stated that in a study of 252 ears, staphylococcus and Pseudomonas aeruginosa were much more frequently the causative organisms than fungi. A study by Wright[2] resulted in a similar observation. Both authors reported that of the fungi found, aspergillus was by far the most frequently encountered organism.

Classification

Infections of the external auditory meatus are classified as acute and chronic. The physician observes the chronic less often than the acute infection since there is no severe pain and the average patient has learned to care for himself. Under the heading of chronic infection should be placed the eczematoid and suppurative types. The causative organisms here are largely fungi. One finds cases of this type during routine preliminary examination, in which he can see black fungi growing on the skin far back in the dark recesses of the ear. The suppurative lesion is characterized by much debris in the canal, no tender areas, a clear tympanic membrane and a foul odor.

The acute infections are circumscribed and diffuse. The first of these two types is usually due to involvement of the hair follicles, sebaceous glands, or ceruminous glands. It is easily identified in that edema and erythema are confined to the outer half of the external auditory canal and are circumscribed. The most painful and also the most difficult to treat is the diffuse infection. This condition is characterized by diffuse swelling of the entire external auditory canal with erythema and edema extending into the skin of th area around the external ear. Otitis externa of the circumscribed and diffuse types is almost 100 per cent bacterial in origin.

Treatment

All who treat these infections realize the difficulties involved, particularly with patients embittered by multiple and painful recurrences. In the past several years, numerous drugs have been added to the armamentarium. These drugs and their effectiveness ae reported by other authors are:

1. Sulfonamide powder (sulfadiazine, sulfathiazole, sulfanilamide): Some authors state that this chemical group has a fungicidal action along with its obvious direct action on bacteria.
2. Cresatin: The action of this drug is fungicidal and also in some degree bactericidal.
3. Iso-par: The action of this ointment is fungicidal.
4. Sulfamylon with streptomycin: This compound is effective against pseudomonas organisms, but has a negligible effect on fungi.
5. Furacin: This compound has a bactericidal effect, but does not inhibit fungi.

In addition, there are the older prescriptions such as salicylic acid in alcohol, Castellani's paint and 70 per cent alcohol.

The treatment of otitis externa varies with the type of infection. Chronic suppurative otitis responds to thorough cleaning and application of an antibiotic, such as aureomycin powder. The patient is instructed to keep the ears dry and to apply 70 per cent alcohol frequently to the external auditory canal. The chronic eczematoid type of

Read before Second District Medical Society October 21, 1951 at Thomasville, Ga.

lesion, with dry scaling exudate, responds fairly well to iso-par ointment. In my experience the biggest problem is the acute diffuse type with severe pain, edema and erythema of the external meatus. I have tried all methods of treatment and have obtained the best results with the following:

First, one cleans the canal with multiple cotton swabs as thoroughly as possible. This procedure is difficult when the canal is closed. Aureomycin powder is lightly dusted in the area, and a small strip of gauze, ¼ inch by 2 inches in size, is placed in the canal as far as possible and is soaked with one-fourth strength Burow's solution (aluminum acetate). The patient is instructed to keep the wick wet with this solution and is given an antibiotic, usually 300,000 units of penicillin or 250 mg. of aureomycin every six hours. One of the triple sulfonamides would be better than penicillin in my opinion, but patients complain of reaction to these compounds. The patient returns for daily changing of the wick until all edema and pain have subsided, usually a period of two or three days. He is then instructed as to treatment at home with furacin, alcohol, or recently, bacitracin-polymyxim ointment. In my experience the use of Burow's solution reduces the recovery period more than the other methods tried.

Summary

Otitis externa, commonly called "fungus ears," is largely caused by bacterial action. Chronic manifestations are eczematoid and suppurative in type, and the acute infections are classified as circumscribed and diffuse.

A method of treatment of acute diffuse otitis externa with Burow's solution and a wick is offered as a means of reducing morbidity from this disease.

References

1. Gill, E. K.: Evaluation of Newer Drugs in Treatment of Otitis Externa, Arch. Otolaryng. 52:25-30 (July) 1950.
2. Wright, W. K.: Use of Aureomycin ni External Otitis; Comparison with Other Drugs Now in Use, Arch. Otolaryng. 52:74-81 (July) 1950.

Presidents and Secretaries

of all

District and County

Medical Societies

Special Conference Meeting January 11

Academy of Medicine Atlanta, Ga.

Additional details and program will appear in December Journal

2nd Lt. Joseph C. Rodriguez
U.S. Army
Medal of Honor





SIXTY YARDS TO GO. From atop the hill, near Munye-ri, Korea, the enemy suddenly opened up a withering barrage. The squad was caught; Red mortars began zero-ing for the kill. Lieutenant Rodriguez (then Pfc., with only seven months service) broke loose and dashed up the fire-swept slope, throwing grenades. Disregarding the fire concentrated on him, he wiped out three foxholes and two gun emplacements. Alone, he accounted for 15 enemy dead, led the rout of the enemy, and saved the lives of his squad.

"When you have to take chances to reach an objective, that's O.K.," says Lieutenant Rodriguez. "But when you can find a surer way, so much the better. That's why I was glad when I heard that people like you own *nearly 50 billion dollars* in U. S. Defense Bonds. I believe that a strong, *peaceful* America is our objective. And the *sure* way to reach it is through backing *our* strength with *your* strength by investing in United States Defense Bonds *now!*"

★ ★ ★

Now E Bonds earn more! 1) All Series E Bonds bought after May 1, 1952 average 3% interest, compounded semiannually! Interest now starts after 6 months and is higher in the early years. 2) *All maturing E Bonds* automatically go on earning *after maturity*—and at the new higher interest! Today, start investing in better-paying Series E Bonds through the Payroll Savings Plan!

Peace is for the strong! For peace and prosperity save with U.S. Defense Bonds!

The U.S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.

Special Articles

CHRIS J. McLOUGHLIN, M.D., Atlanta

The

DIABETES PROBLEM

The passing of each decade brings new discoveries to help prolong life. The average life expectancy of men and women in this country has doubled in the last 150 years, and we are looking forward to an era which will find a much greater percentage of our population living beyond the allotted three score and ten.

Barely two per cent of our population were over 60 years of age in 1900. The percentage has climbed steadily, however, so that now more than 8.3 per cent are in this group. This means an additional burden of caring for the more than 12 million people of this age group, together with all of the chronic diseases from which they suffer. It means an added responsibility for the physician. He must be aware, more than ever before, of the diseases to which a greater proportion of the population will be subjected. The patient must be protected when possible from those diseases to which advanced age makes him most susceptible.

Actually, this increase in longevity is more apparent than real. Our advances in medicine have seldom been made in the treatment of the chronically ill. New discoveries have almost always been pointed at overcoming acute illnesses which in most instances afflict the young. It is only by saving the young, therefore, from those illnesses which could bring death that we are able to have these young people grow to an age where they may then become subject to the more chronic diseases. A man living in any century who was able to live beyond the age of 60 could well be expected to have acquired immunity to many acute conditions and infections which could have meant serious harm to younger men. These older men with such an immunity may well have been just as vigorous as those of our day, until such time as the ravages of age had come upon them. Medicine and science have triumphed tremendously over acute disease. We now are entering the Age of the Chronically Ill.

One disease which may be found in any age group is diabetes. The discovery of insulin gave rise to the hope that we would have 100 per cent control of this condition and that all so afflicted might live without fear of death from this disease. Such is not so. In 1900, very few diabetics were recognized. It was not until the patient was almost in extremis that the diagnosis was made. Diabetes was twenty-seventh among the causes of death in that year. By 1945, diabetes and its complications were much more readily recognized. It had sprung to eighth place among diseases as a cause of death. Physicians have learned to recognize diabetes and understand its complications. Consequently, this awareness permits the diagnosis more frequently and results in the reporting of the disease as one of the principal causes of death. If it is so easily recognized, therefore, and we have the means at hand to control it, more effort must be exerted to prevent damage due to this condition. The earlier the abnormality is discovered, the easier it is to control and the more normal and effective the life of a diabetic can be.

CLASSIFIED ADVERTISING

INDUSTRIAL WORK full time in Atlanta wanted by 33-year-old physician; category IV; 1950 graduate; AOA; approved internship industrial hospital, one year GP. Please contact Journal of the Medical Assn. of Ga., Classified advertising bureau, 875 West Peachtree, N. E., Atlanta.

WANTED: Young colored physician for a county in Georgia with a large colored population. Only one colored physician in this area at the present time. Please contact Box 36, Journal of The Medical Ass'n. of Ga., 875 W. Peachtree, NE, Atlanta.

GOLF CLUBS: One new set of Bobby Jones registered irons; one new set of registered woods with nylon covers. Good leather bag. A fine Christmas present at a bargain. Address: Golf Outfit, care Journal of The Medical Ass'n. of Ga., 875 W. Peachtree, NE, Atlanta.

WANTED: Assistant to General Practitioner —rural area. Large amount of O.B. Salary to be agreed upon. Reply to Box 22, Journal of The Medical Ass'n. of Ga., 875 W. Peachtree, NE, Atlanta.

Protect your income with

GROUP SICKNESS and ACCIDENT PLAN

Designed especially for the

MEDICAL ASSOCIATION OF GEORGIA

This plan of true group insurance was installed in 1951, following unanimous approval and recommendation by your Association's Insurance Committee.

Phone or write:

LAFAYETTE DAVIS, Branch Manager

1712 Atlanta Federal Savings Bldg. Phone LAmar 6455

PROVIDENT LIFE AND ACCIDENT INSURANCE COMPANY

Home Office: Chattanooga

Where Pharmacy Is a Profession... Not a Side Line

Marshall & Bell

Atlanta, Georgia

TWO ETHICAL PRESCRIPTION SHOPS

MEDICAL ARTS BUILDING
LAMAR 1331

DOCTORS BUILDING
LAMAR 2611

Catering Especially to Your Needs in
BIOLOGICALS, AMPOULES AND COUNCIL ACCEPTED PROPRIETARIES

FOR DIABETICS

Lister's Foods, Cellu Products
Chatillon Gram Scales, Joslin's Manuals
Sugar Free Ginger Ale

In 1940, the American Diabetes Association was organized. At the present time it includes over 1,400 physicians who are engaged in directing diabetic clinics, treating individual patients, teaching diabetes control and management to both patients and other doctors, and conducting important basic researches. For the past several years now the American Diabetes Association has encouraged and promoted a Diabetes Detection Week. This is scheduled in the fall of each year, and this coming year it will begin on the 16th and continue through the 22nd of November. During this time every person in every community in the country is encouraged to try and have some form of a test to determine whether or not diabetes may be present. Last year, upwards of two million persons were tested in doctors' offices or testing centers. The results of these tests varied considerably and revealed that from one-half of one per cent to as high as 2.37 per cent of those tested were diabetic. Most of these tests are run on samples of urine and the percentages of positive urine tests showed considerable variation, running from five to over 13 per cent. Further follow-up studies are of course necessary to determine whether all of these positive urines are due to a diabetic condition. We admit that testing specimens of urine without adequate follow-up is at best a haphazard determination. It requires careful work on the part of a physician to make a diagnosis.

There are two primary goals of the case-finding program. First, newly discovered diabetics must be brought under medical management. Secondly, pertinent statistics and data must be accumulated for adequate analysis. Without the latter, full comprehension of the disease can never be accomplished. The responsibility for the accumulation of statistics, therefore, must fall upon the individual physicians who are to examine these patients and follow up the initial findings.

An individual who has a positive test in any diabetes detection drive will be referred to his physician for a complete diagnosis. Suitable procedures for making the diagnosis must therefore be adopted. The best method for determination of the presence of diabetes is a glucose tolerance test. A simple fasting blood sugar is in most instances absolutely valueless for the detection of diabetes. A great many diabetic individuals will have a normal fasting blood sugar. The Folin-Wu method of determination of blood sugar measures not only glucose but many other reducing substances in the blood. Normals for this method should be 130 mgm. per cent fasting, or over 200 mgm. per cent after eating. The Somogyi method measures only true glucose and no other reducing substances, and should be considered abnormal if there is over 110 mgm. per cent of sugar in the fasting blood or over 150 mgm. per cent after eating. With capillary blood sugar, the true glucose value should be considered abnormal if it measures more than 120 mgm. per cent fasting, or over 200 mgm. per cent after eating.

In Georgia we have been fortunate to have a Department of Public Health which has been very energetic in aiding us in the detection of diabetes. This department has been doing mass surveys for tuberculosis and syphilis since 1942. The incorporation of a test for diabetes was not difficult, although the finding, testing and adoption of a method which could be used to handle large numbers of people was very difficult. Diabetes detection by examination of the urine alone is notoriously inaccurate. The Georgia Department of Public Health in running these diabetic detection surveys has employed what is known as the Anthrone method of blood sugar determination. This method is comparable to other methods of blood sugar determination. It is quick, efficient, accurate, and can be used to test large numbers of people in a short time and above all, the findings are reproducible. We should be proud of the detection program that is going on in our state and should give it every assistance. In the year 1951, 188,000 were examined. Up to September 1, 1952, 129,223 completed their tests, and it is expected that 82,000 more will be tested before the first of the year. This means a total of approximately 210,000 who have been tested for abnormal carbohydrate metabolism this year. The incidence of diabetes in the large number who have been examined approximates two per cent. Comparatively few of this number have been aware that they had diabetes. These examinations, therefore, will provide the doctors of this state with 4,200 new patients, who must be checked carefully to substantiate the diagnosis of an abnormal carbohydrate metabolism. Since follow-up studies with a modified glucose tolerance test have already been done before these patients are referred to their physicians, very few of these individuals will have false positive tests. These diabetics must then be instructed in correct diet, proper weight control, and the use of insulin if necessary. From then on it becomes the burden of the physician to watch them carefully several times a year so as to act as a true guardian of their health. We urge every doctor in the state to prepare himself for this additional burden—for it is his problem to bring these patients, not only through the age of youth and infectious disease, but through the age of chronic illness.

This Fall we hope to organize a branch of the American Diabetes Association in Atlanta. This association will be affiliated with the National Association and it is hoped that in time, further local associations may be organized. The objectives of this Atlanta Diabetes Association will be as those of the American Diabetes Association. They are: First, to find the greatest number possible of yet undiscovered diabetics. Second, to assist diabetics in their effort to lead normal lives. Third, to improve the treatment of diabetes. Fourth, to bring the newest information about disease to all interested physicians. Fifth, to encourage and support research on diabetes. Sixth, to promote public knowledge about diabetes and the understanding of the individual diabetic's problem.

There is never a substitution in . . .

LANE *filled PRESCRIPTIONS*

LANE Registered Pharmacists, conforming always to the rigid ethics of their profession, use meticulous care in the compounding of Prescriptions entrusted to their care.

Lane large buying power and rapid turnover make it possible to keep on hand at all times, for your protection, fresh, potent drugs for the compounding of the simplest as well as the most intricate Prescription. Pharmaceuticals from . . .

World famous manufacturers whose names mean outstanding excellence in the manufacture of ethical medicines

LANE Rexall DRUG STORES



W. W. ORR

DOCTORS' BUILDING

478 Peachtree St., N.E. Atlanta, Ga.

Offices Arranged to Suit Your Personal Needs

ATLANTA'S MEDICAL CENTER

See

ADAMS-CATES COMPANY

Agents

Hurt Building

ATLANTA, GEORGIA

Or

E. H. SKINNER, *Manager*

224 Doctors Building

ATLANTA, GEORGIA

The PSYCHOLOGICAL CARE *of the* CANCER PATIENT

ENOCH CALLAWAY, M.D., LaGrange

While good psychology is desirable with all sick persons, it is particularly necessary in the case of patients suffering from cancer. Most people throughout their lives have known nothing about cancer except the terminal stages. Cured cancer patients have usually concealed the fact that they have had the disease from both their friends and even from close members of their families. This secretive behavior has caused cancer to be considered by a large majority of people as totally incurable and associated in its last stages with suffering and ultimately with death. In most persons even the suspicion of having cancer produces an immediate and marked depressive state.

I have always felt that cancer patients could be best served by telling them the truth about the diagnosis of their condition and the possibilities of arrest and permanent cure. It seems the height of foolishness to believe that a patient will undergo serious surgery or allow the administration of x-ray and radium therapy and still remain in ignorance of the fact that they have cancer. Telling the patient the truth tends to break down the barriers between the patient and the physician and allows the patient to ask for and receive a tremendous amount of comfort from the attending doctor. It also allows the family of the patient to give them the love and sympathy and attention which they deserve instead of carrying on the false pretense that there is practically nothing wrong and that there is absolutely nothing to worry about.

I have always practiced telling patients with cancer that they had cancer and discussing the condition with them in full. I have never had any cause to regret this course of action, and I am firmly convinced that the patients not only become more cooperative in receiving treatment and in listening to advice, but since they have had all of the vague doubts and fears dispelled they are able to face the actual facts of the condition in a much better frame of mind. The human mind is so constituted that there is nothing which can produce more torment than uncertain fears of the unknown coupled with an inability to discuss their fears and worries with another person. While on a practical and clinical basis I had arrived at this conclusion, I was very glad to know that Finesinger and his associates had made a very exhaustive study of the psychological conditions of cancer patients who had been told that they had cancer and the psychological condition of cancer patients who had not been told. From this study they found that the patients who had been told their condition and had had this matter frankly discussed with them were practically always in a much better psychological state than the ones who had not been told the truth about their disease.

In telling a patient that they have cancer, one should be willing to take sufficient time and give sufficient understanding and sympathy to allow the patient to adjust to his condition. Doctors who say, "I can't bear to tell a patient that they have cancer. I hate to make them feel so bad" should carefully analyze themselves and see whether they are sympathetic with the patient or sympathetic with themselves. To discuss this condition with a patient entails a considerable amount of emotional and mental strain on the part of the doctor. However, I do not know of anything that pays off in larger divi-

"PREMARIN"®

Highly effective • Well tolerated • Imparts a feeling of well-being

"PREMARIN"

Thousands of physicians prefer "Premarin" for the treatment of the menopause.

"PREMARIN"

Estrogenic Substances (water-soluble)

"PREMARIN"

also known as Conjugated Estrogens (equine)

"PREMARIN"

AYERST, McKENNA & HARRISON Limited • New York, N. Y. • Montreal, Canada

dends of satisfaction than to realize that the patient has been brought around to an acceptance of the condition and is in a state of mind where he can have peace and happiness as long as this is physically possible. I have frequently heard doctors say that they were afraid that patients would commit suicide if told that they had cancer. Since none of our patients have ever committed suicide, I do not believe this is a valid reason for not telling a patient the truth. In fact, I personally believe that doubt and uncertainty are much more likely to drive a person into self-destruction.

Since we fail to materially benefit the actual pathological condition of a large number of our cancer patients, we have failed totally as far as these patients are concerned unless we can give them comfort and cheer. Cancer clinics and x-ray therapy departments should be arranged to be as cheerful looking and attractive as is possible. The personnel should be constantly on the alert to maintain a friendly, cheerful, helpful, and sympathetic attitude toward the patients. While it is very bad public relations and business policy to be abrupt or to speak sharply to any patient, it is doubly bad not to maintain at all times a cheerful and friendly attitude with patients suffering from cancer.

Patients who are to have resections of the colon with a resultant colostomy have this matter discussed with them in detail. They are told that in the immediate postoperative period the colostomy will be very uncomfortable and that the condition will be extremely messy. They are told that as their convalescence progresses and they learn to care for the colostomy and learn to be able to maintain a solid condition of their bowel movements by diet that they will find increasing comfort and a diminishing amount of inconvenience. Before being dismissed from the hospital they are taught to irrigate the colostomy and to care for it and are not allowed to leave the hospital until they have shown an ability to carry out these instructions. We have extremely little complaint from these patients and the great majority of them never desire to wear any type of bag or cup except under unusual circumstances. A few of them prefer to wear a very light plastic cup over the colostomy when they go to their businesses or churches or social gatherings as they fear that they might inadvertently allow gas to escape without realizing it. The patients who are allowed to wake up from an anesthetic and discover that they have an artificial anus when they have had no preliminary psychological preparation for this condition usually never adapt themselves to this change and lead relatively uncomfortable and miserable lives.

When radical surgery is to be performed for cancer of the tongue, the floor of the mouth, or anywhere about the head and neck, the resulting disability and disfigurement can produce a severe emotional shock unless the patient has had adequate preoperative psychological preparation. The difficulties in talking and swallowing should be carefully explained to them. They should be told that early use of their mouths and throats will hasten recovery, but that if this early use proves impossible they can be fed through a tube inserted through the nasal passage. The possibility of having to do a tracheotomy on these patients should always be remembered and this should be frankly explained to them.

All radical surgery is followed by some degree of physiological or anatomical disability and this should be carefully explained to the patient. They should be told how they can best compensate for these disabilities or if they can not compensate for them, they should be told how much these disabilities will limit their activities, both from a standpoint of productivity and pleasure.

A few hours of preoperative psychological preparation is worth more than many days of psychotherapy given after the patient has developed an unnecessary postoperative neurosis or depression.

Postoperatively, patients should have every encouragement to rehabilitate themselves rapidly and no opportunity should be missed to build up their pride about overcoming their handicaps. When possible we have patients who have had similar operations visit them while they are in the hospital and encourage them by telling them and showing them what they have been able to accomplish.

Any method that tends to build up the moral of the cancer patient should be used, but the most effective single factor in this is truthfulness, understanding, and sympathy on the part of the attending physician.

Georgia M.D.'s Attend

The Southern Medical Association held their 46th Annual Meeting in Miami, Florida on November 10-13. Georgia participants on the program were: Drs. Robert B. Greenblatt, Augusta; H. E. Nieburgs, Augusta; Stephen W. Brown, Augusta; Bruce Logue, Atlanta; John S. Atwater, Atlanta; C. Raymond Arp, Atlanta; Harry R. Lipton, Atlanta; Raymond S. Grispell, Atlanta; Exum Walker, Atlanta and James R. Simpson, Atlanta.

Other Georgia doctors taking part in the program were: F. Vatnar Kristoff, Atlanta; Hudson Jost, Athens; Donald S. Bickers, Atlanta; Robert C. Pendergrass, Americus; J. Dudley King, Atlanta; Joseph H. Patterson, Atlanta; William W. Bryan, Atlanta; William L. Dobes, Atlanta; Herbert S. Alden, Atlanta; Hal M. Davison, Atlanta; Roy L. Robertson, Atlanta; Patrick C. Shea, Atlanta; Joseph H. Kite, Atlanta; Harold P. McDonald, Atlanta; Charles A. Eberhardt, Atlanta, and John P. Hill, Albany.

Also appearing on the program were: Drs. Joseph H. Brannen, Albany; Peter L. Scardino, Savannah; Charles H. Prince, Savannah; Fred B. Hodges, Jr., Atlanta; Edgar Boling, Atlanta; E. M. Dunstan, Atlanta; W. J. Murphey, Atlanta; H. C. Schenck, Atlanta; R. H. Oppenheimer, Atlanta, and Mox Michael, Jr., Atlanta.



BLACKMAN'S SANATORIUM

ATLANTA, GA.

A Medical Institution featuring complete hydrotherapy and other physical measures.

THE ALCOHOL PATIENT is given specialized treatment and instruction.

Cardiac, Nutritional and Arthritic cases received.

25 rooms of service and comfort — hotel type.

418 Capitol Ave., S. E.
4 blocks from the Capitol

The Earl Johnson Sanatorium

For the care of nervous, mental, senile, alcoholic, and addicted cases. *Moderate rates.*

Operated by C. Earle Johnson, Jr., M.D., Psychiatrist-in-Chief, F.A.P.A., F.A.C.P. Diplomate of the American Board of Psychiatry and Neurology.

The most modern and effective psychiatric methods are employed.

Telephone: 3-3369 or 3-3360

Write: Drawer 106
MERIDIAN, MISSISSIPPI

CERTIFIED MILK



R. L. Mathis Certified Dairy, Rainbow Drive
DEarborn 4463, Decatur

There Is No Other Milk for Human Consumption That Is More Frequently Tested

Certified Milk Will Remain the Milk of Choice for Discriminating Customers

CERTIFIED MILK is being sold in over a thousand communities throughout the United States. During the last twenty years no disease outbreak has been traced to its use.

CERTIFIED MILK stands first in Nutrition. Resistance to disease depends largely on the health of the individual.

The Association

COMMITTEE APPOINTMENTS FOR 1952-1953

STANDING COMMITTEES

Committee on Scientific Work
Thomas L. Ross, Jr., Chairman, Macon
H. Ansley Seaman, Waycross — Charles L. Prince, Savannah
C. F. Holton, Savannah — David Henry Poer, Atlanta

Committee on Legislation
Spencer A. Kirkland, Chairman, Atlanta
Jack C. Norris, Vice Chairman, Atlanta
C. F. Holton, Savannah — William P. Harbin, Jr., Rome
Marcus Mashburn, Cumming — Allen M. Collingsworth, Atlanta
Tully T. Blalock, Atlanta — J. Harry Rogers, Atlanta
Ralph O. Bowden, Savannah — James L. Campbell, Jr., Valdosta
J. A. Redfearn, Albany
R. C. Pendergrass, Americus — Grady Coker, Canton
B. Hollie Hand, LaGrange — J. Victor Roule, Augusta
Allen H. Bunce, Atlanta — C. C. Aven, Atlanta
William P. Harbin, Rome — W. F. Reavis, Waycross

Committee on Medical Education and Hospitals
R. Hugh Wood, Chairman, Atlanta
G. Lombard Kelly, Augusta — C. H. Richardson, Sr., Macon

Committee on Medical Defense
Marion C. Pruitt, Chairman, Atlanta
H. Dawson Allen, Milledgeville — C. F. Holton, Savannah

Committee on Maternal Welfare
H. F. Sharpley, Jr., Chairman, Savannah
E. D. Colvin, Vice Chairman, Atlanta
Guy V. Rice, Secretary, Atlanta
Chas. M. Mulherin, Augusta — Robert B. Martin, III, Cuthbert
F. H. Simonton, Chickamauga — R. L. Johnson, Douglas

Committee on Rural Health
Frank Vinson, Chairman, Ft. Valley
Charles T. Brown, Guyton — Wilbur D. Hall, Calhoun
T. Earl Dupree, Bainbridge — L. H. Shellhouse, Willacoochee
C. B. Palmer, Covington — R. H. Bramblett, Cumming
F. A. Sams, Jr., Fayetteville — T. C. Nash, Philomath
J. B. Kay, Byron — T. F. Sellers, Atlanta

Committee on Industrial Health
Allen M. Collingsworth, Chairman, Atlanta
Lester M. Petrie, Vice Chairman, Atlanta
George R. Conner, Columbus — Augustus H. Frye, Jr., Griffin
J. B. Peniston, Newnan — John G. Sharpley, Jr., Savannah
P. L. Hilsman, Albany
Lester Harbin, Rome — W. Bruce Schaefer, Toccoa
Chas. L. Ridley, Jr., Macon — T. J. Ferrell, Waycross

Committee on Public Relations
Stephen T. Brown, Chairman, Atlanta
D. Lloyd Wood, Vice Chairman, Dalton
T. E. McGeachy, Decatur — C. F. Holton, Savannah
David Henry Poer, Atlanta — William P. Harbin, Jr., Rome
C. C. Aven, Atlanta

Committee on Professional Conduct
Ralph H. Chaney, Chairman, Augusta
Edgar H. Greene, Atlanta — Enoch Callaway, LaGrange
A. M. Phillips, Macon — W. F. Reavis, Waycross

Committee on History and Vital Statistics
J. Calvin Weaver, Chairman, Atlanta
Ernest F. Wahl, Thomasville — Anne Hopkins, Savannah
Frank K. Boland, Atlanta

Committee on Public Health
C. L. Ayers, Chairman, Toccoa
B. Hollis Hand, LaGrange — Chris. J. McLoughlin, Atlanta

Districts
1—J. M. Byne, Jr., Waynesboro
2—H. M. McKemie, Albany
3—Frank Vinson, Fort Valley
4—J. M. Bryant, Jr., Newnan
5—Ben S. Read, Atlanta
6—W. D. Hazlehurst, Macon
7—W. C. Mitchell, Smyrna
8—J. B. Avera, Brunswick
9—Hartwell Joiner, Gainesville
10—J. B. Neighbors, Jr., Athens

R. C. Montgomery, Taylor — James W. Smith, Jr., Meriwether-Harris
D. B. McRae, Telfair — J. R. Whitley, Jackson-Barrow
H. D. Youmans, Toombs — W. C. Kitchens, Clarke
O. H. Cheeks, Laurens — Russell Thomas, Sumter
N. J. Newsom, Washington — J. T. Holt, Appling
C. K. Richards, Gordon — W. B. Dillard, Jr., Bartow
J. D. Owens, Wilcox — G. W. Willis, Ben Hill-Irwin
Norman J. Crowe, Worth — C. C. Brook, Blue Ridge
Ernest Thompson, Walton — Clair A. Henderson, Chatham
H. A. Goodwin, Chatooga — J. W. Wallace, Coffee
Lloyd C. Ceargin, Whitfield — Edgar Holmes, Colquitt
T. A. Sappington, Upson — F. O. Garrison, Habersham
A. J. Davis, Richmond — L. E. Hackett, Mitchell
J. C. Patterson, Randolph-Terrell — T. L. Hodges, Jr., Monroe
R. F. Spanjer, Polk — W. M. Moses, Montgomery
Hugh Bickerstaff, Muscogee — Gregg Smith, So. Georgia
E. Lancaster, Jasper — Grady Black, Spalding
W. D. Hazelhurst, Bibb — A. G. Pinkston, Jr., Tattnall

Committee on Cancer
J. Elliott Scarborough, Chairman, Emory University
Hoke Wammock, Vice Chairman, Augusta
David Henry Poer, Atlanta — Thomas Harrold, Macon
R. C. Pendergrass, Americus — Lee Howard, Savannah
Enoch Callaway, LaGrange — Neal F. Yeomans, Waycross
W. F. Jenkins, Columbus — Kirk Shepard, Thomasville
John Funke, Atlanta — Charles R. Andrews, Jr., Canton
John L. Barner, Athens
F. D. Eldridge, Valdosta — Major F. Fowler, Atlanta
Robert Harbin, Rome — D. Lloyd Wood, Dalton
Everett L. Bishop, Atlanta — Wadley R. Glenn, Atlanta

Cancer Commission (Executive Committee)
Drs. Scarborough, Chairman, Wammock, Poer, Pendergrass, Bishop, Callaway, and Harrold

Insurance Board
W. S. Dorough, Chairman, Atlanta
John L. Elliott, Vice Chairman, Savannah
W. L. Pomeroy, Waycross — D. Lloyd Wood, Dalton
Luther H. Wolff, Columbus

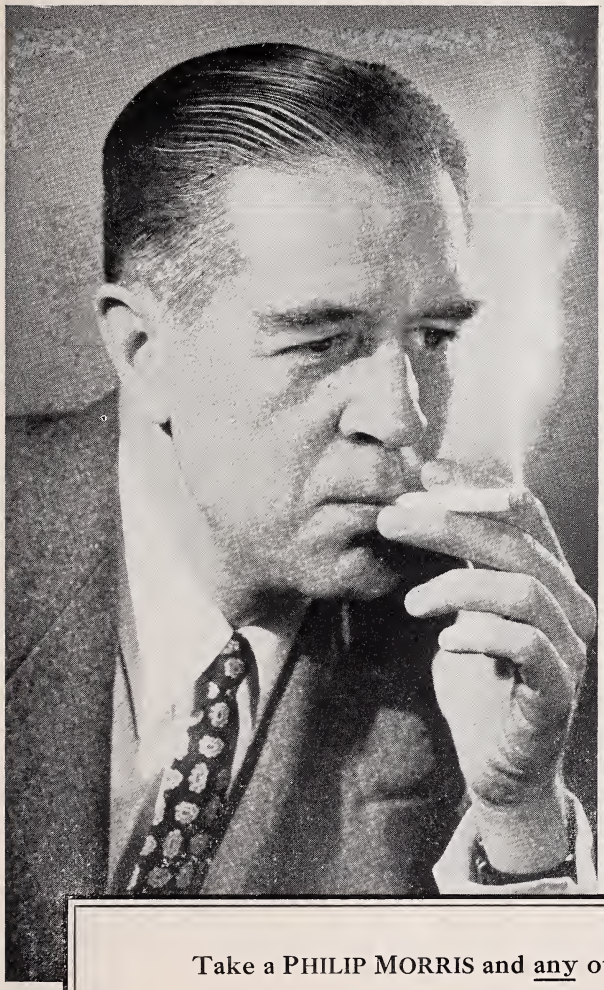
SPECIAL COMMITTEES

Advisory Committee to Woman's Auxiliary
Ralph H. Chaney, Chairman, Augusta
Edgar H. Greene, Atlanta — Enoch Callaway, LaGrange
A. M. Phillips, Macon — W. F. Reavis, Waycross

Committee on Awards
Mark S. Dougherty, Jr., Chairman, Atlanta
Hoke Wammock, Co-chairman, Augusta
Jules Victor, Jr., Savannah — Edgar D. Shanks, Jr., Atlanta

Committee on Constitution and By-Laws
Allen H. Bunce, Chairman, Atlanta
Enoch Callaway, Vice Chairman, LaGrange
W. F. Reavis, Waycross — C. F. Holton, Savannah
David Henry Poer, Atlanta — John A. Dunaway, Attorney
John W. Simmons, Brunswick — Sam M. Talmadge, Athens

Committee on American Medical Education Foundation
Tully T. Blalock, Chairman, Atlanta
J. M. Byne, Vice Chairman, Waynesboro
Fred Murphy, Thomasville — A. M. Phillips, Macon
Clarence Butler, Columbus — C. H. Allen, Bremen
J. R. Turner, LaGrange — Ralph Chaney, Augusta



Doctor, be your own judge... try this simple test

With so many claims made in cigarette advertising, you, Doctor, no doubt prefer to judge for yourself. So won't you make this simple test?

Take a PHILIP MORRIS and any other cigarette

1. Light up either one first. Take a puff—get a good mouthful of smoke —and s-l-o-w-l-y let the smoke come *directly* through your nose.
2. Now, do exactly the same thing with the other cigarette.

You will notice a distinct difference between PHILIP MORRIS and any other leading brand.

PHILIP MORRIS

Philip Morris & Co. Ltd., Inc., 100 Park Avenue, New York 17, N. Y.

Committee on Revision of Pharmacopeia of U. S.
Allen H. Bunce, Chairman, Atlanta
C. C. Aven, Atlanta — Hal M. Davison, Atlanta

Committee on Blood Banks
James C. Thoroughman, Chairman, Augusta
Lee Howard, Jr., Savannah — Edward S. Marks, Marietta

Committee on Abner Wellborn Calhoun Lectureship
Daniel C. Elkin, Chairman, Atlanta
Irvine Phinizy, Augusta — Frank K. Boland, Atlanta
Calhoun McDougall, Atlanta — J. Reid Broderick, Savannah
Guy O. Whelchel, Athens

Medical Advisory Committee to Selective Service System
Carter Smith, Chairman, Atlanta
A. O. Linch, Co-chairman, Atlanta
David Henry Poer, Atlanta — T. F. Sellers, Atlanta
L. Minor Blackford, Atlanta — Wm. G. Hamm, Atlanta
Cyrus W. Strickler, Jr., Atlanta — S. A. Garrett, D.D.S., Atlanta
Chas. C. Rife, D.V.M., Atlanta

Committee on Medical Civil Preparedness
Edgar M. Dunstan, Chairman, Atlanta
Robert W. Candler, Atlanta — Charles Eberhart, Atlanta
Joseph S. Skobba, Atlanta — J. H. Pinholster, Savannah
J. Z. McDaniel, Albany — T. J. Ferrell, Waycross
J. S. Holder, LaGrange — Lee Battle, Jr., Rome
Chas. E. Dowman, Atlanta — J. K. Burns, Jr., Gainesville

Fraternal Delegates to Other States
ALABAMA—Hugh Bickerstaff, Calumbus; John McGehee, Cedartown; William H. Wall, Blakely.
FLORIDA—George R. Dillinger, Thomasville; James L. Campbell, Jr., Valdosta; J. A. Leaphart, Jesup.
NORTH CAROLINA—J. Harry Rogers, Atlanta; W. H. Good, Jr., Toccoa; Robert E. Ridgway, Royston.
SOUTH CAROLINA—Ralph O. Bowden, Savannah; Shephen W. Brown, Augusta; A. B. Daniel, Statesboro.
TENNESSEE—Fred H. Simonton, Chickamauga; Robert T. Jones, III, Canton; Robert F. Norton, Rome.

State Board of Health
First District: James M. Byne, Jr., Waynesboro, Sept. 1, 1957; Second District: A. G. Funderburk, Moultrie, Sept. 1, 1957; Third District: R. C. Montgomery, Butler, Sept. 1, 1954; Fourth District: M. M. Head, Zebulon, Sept. 1, 1955; Fifth District: Spencer A. Kirkland, Atlanta, Sept. 1, 1954; Sixth District: A. M. Phillips, Macon, Sept. 1, 1056; Seventh District: Fred H. Simonton, Chickamauga, Sept. 1, 1956; Eighth District: C. J. Malloy, McRae, Sept. 1, 1956; Ninth District: R. Lee Rogers, Gainesville, Sept. 1, 1956; Tenth District: Thos. W. Goodwin, Augusta, Sept. 1, 1955; *Georgia Dental Association*—J. M. Hawley, Columbus, Sept. 1, 1952; J. G. Williams, Atlanta, Sept. 1, 1952; *Georgia Pharmaceutical Association*—Preston Sumner, East Point, Sept. 1, 1953; A. T. McRae, Douglas, Sept. 1, 1956.

State Board of Medical Examiners
Fred J. Coleman, Dublin; J. W. Palmer, Ailey; C. K. Wall, Thomasville; Grady N. Coker, Canton; R. H. McDonald, Newnan; A. M. Deal, Statesboro; Alexander B. Russell, Winder; Rufus A. Askew, Atlanta; W. H. Powell, Hazlehurst.

Committee on Committee Reorganization
W. F. Reavis, Chairman, Waycross
A. M. Phillips, Macon — Enoch Callaway, LaGrange

Committee on Veterans Administration Affairs
Hartwell Joiner, Chairman, Gainesville
Alfred O. Colquitt, Jr., Marietta — Bernard P. Wolff, Atlanta

Committee on Chronic Illness
L. Minor Blackford, Chairman, Atlanta

Report of MAG COUNCIL MEETING

of October 5, 1952 in Atlanta

The Council of the Medical Association of Georgia met at 11:00 a. m. with the following present: Drs. H. Dawson Allen (Chairman), C. F. Holton, William P. Harbin, Jr., David Henry Poer, Lee Howard, George R. Dillinger, W. G. Elliott, J. W. Chambers, Marion C. Pruitt, D. Lloyd Wood, Sage Harper, H. L. Cheves, Carl S. Pittman, Clarence B. Palmer, Charles R. Andrews, Jr., and Messrs. Milton Krueger and Sid Wrightsman, Jr.

The following action was taken.

1. *Approved* the report of Chairman Tom Ross, Jr. of the Scientific Work Committee who emphasized the existing need for additional papers from members in all District Societies.

2. *Approved* the objectives of the Georgia Medical Committee for Better Government as outlined by Acting-Chairman Clarence C. Butler of the Committee.

3. *Approved* the report of Chairman James C. Thoroughman of the Committee on Blood Banks which, in addition to proposing the Committee's enlargement, recommended:

a. That the Committee be expanded to include representatives suggested by the American Medical Association.

b. That existing blood banks in the state be surveyed so that such information may be furnished members at the 1953 Annual Session.

c. That Committee work be correlated with other organizations dealing with blood banks.

d. That an education program within the Medical Association of Georgia be initiated so as to acquaint physician-members with their responsibility to inform blood recipients as to the moral obligation involved in replacing blood.

4. *Approved* the report of Chairman Hugh Wood of the Committee on Medical Education and Hospitals which recommended:

a. That aspects of Postgraduate training, now sponsored by the Medical Association of Georgia and poorly attended, be referred for study to the Georgia Academy of General Practice for its sug-

The NEW YORK POLYCLINIC

MEDICAL SCHOOL AND HOSPITAL (Organized 1881)

(The Pioneer Postgraduate Medical Institution in America)

OBSTETRICS AND GYNECOLOGY

A full time course. In obstetrics: lectures; prenatal clinics; witnessing normal and operative deliveries; operative obstetrics (manikin). In gynecology: lectures; touch clinics; witnessing operations; examination of patients pre-operatively; follow-up in wards post-operatively. Obstetrical and gynecological pathology. Anesthesia. Operative gynecology on the cadaver. Attendance at conferences in obstetrics and gynecology.

EYE, EAR, NOSE AND THROAT

A three months combined full-time refresher course consisting of attendance at clinics, witnessing operations, lectures, demonstration of cases and cadaver demonstrations; operative eye, ear, nose and throat on the cadaver; clinical and cadaver demonstrations in bronchoscopy, laryngeal surgery and surgery for facial palsy; refraction; radiology; pathology, bacteriology and embryology; physiology; neuro-anatomy; anesthesia; physical medicine; allergy; examination of patients preoperatively and follow-up postoperatively in the wards and clinics.

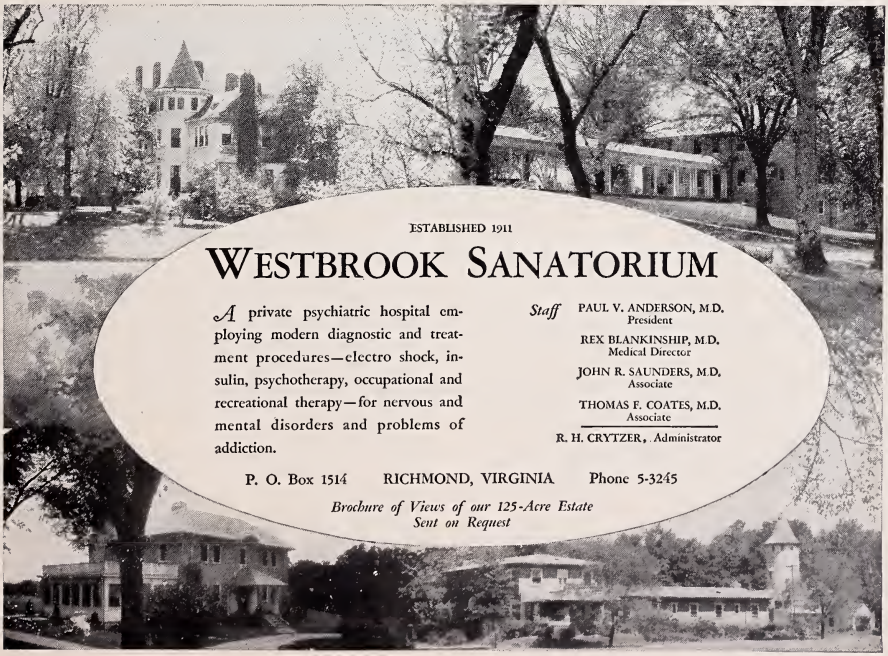
UROLOGY

A combined full-time course in Urology, covering an academic year (8 months). It comprises instruction in pharmacology; physiology; embryology; biochemistry; bacteriology and pathology; practical work in surgical anatomy and urological operative procedures on the cadaver; regional and general anesthesia (cadaver); office gynecology; proctological diagnosis; the use of the ophthalmoscope; physical diagnosis; roentgenological interpretation; electrocardiographic interpretation; dermatology and syphilology; neurology; physical medicine; continuous instruction in cystoendoscopic diagnosis and operative instrumental manipulation; operative surgical clinics; demonstrations in the operative instrumental management of bladder tumors and other vesical lesions as well as endoscopic prostatic resection.

PROCTOLOGY AND GASTROENTEROLOGY

A combined course comprising attendance at clinics and lectures; instruction in examination, diagnosis and treatment; witnessing operations; ward rounds; demonstration of cases; pathology; radiology; anatomy; operative proctology on the cadaver; attendance at departmental and general conferences.

For Information about these and other courses Address
THE DEAN, 345 West 50th Street, New York 19, N. Y.



gestions of improvement and possible sponsorship in the future.

b. That consideration be given to the presentation of a basic law prescribing the standard of training for practical nurses and qualifications for licensure.

c. That Constitutional Amendment 4 receive increased publicity among Association and Auxiliary members to assure its adoption in the November election.

d. That the Council make greater effort to bring to Georgia physicians the necessity and desirability of continuing contributions to the American Medical Education Foundation.

5. *Approved* the report of Chairman Tully Blalock of the American Medical Education Foundation which recommended:

a. That the AMEF donation drive be placed on a county medical society basis, guided by a District Committee member in every case.

b. That Auxiliary members be utilized in local campaign drives.

6. *Approved* the report of Chairman C. L. Ayers of the Public Health Committee which recommended:

a. That the Public Health Committee serve as a Committee on Hospitals in cooperation with the Committee on Medical Education and Hospitals.

b. That a subcommittee, composed of Committee members in proximity to Atlanta, confer regularly with the Hospital Division of the Georgia Department of Public Health.

c. That a statewide meeting of Association members and hospital representatives be held in Atlanta, preferably during November.

7. *Approved* the report of Chairman W. S. Dorough of the Insurance Committee which contained the recommendations:

a. That the Council officially endorse the Physicians Service of Columbus (Ga.) as a qualified Blue Shield agency, so recognized by the American Medical Association.

b. That Association members make greater effort to cooperate with individual representatives of the commercial insurance companies now writing the Georgia Plan.

8. *Approved* the report of Chairman Hartwell Joiner of the Special Committee on Veterans Administration Affairs which recommended:

a. That all discussion of physicians' fees for service be channelled to VA medical officials through the Committee.

b. That the Committee request the VA to present to physicians a proper treatment and diagnosis record on all hospitalized veterans discharged to outpatient treatment.

c. That the functions of the Committee be published in an early issue of The Journal for the information of all members.

9. *Approved* the report of the Committee on Rural Health, outlined by Mr. Wrightsman in the absence of Chairman Frank Vinson, which described the Committee's initial meeting on September 25 in Atlanta, with Dr. F. S. Crockett, Chairman of the AMA Council on Rural Health, in attendance, and which recommended:

a. That each District Committee member select a "test tube" county most lacking in apparent health facilities in the respective District and assess the basic needs thereof.

b. That the District Committee member confer with county Farm Bureau and Home Demonstration Agents, the county health officer and public health nurse, where possible, to determine the best possible steps to be taken to improve health aspects.

10. *Approved* report of Chairman Stephen T. Brown of the Public Relations Committee, outlined by Mr. Wrightsman in Dr. Brown's absence, which recommended:

a. That the President and Public Relations Committee chairman of the Woman's Auxiliary to the Medical Association of Georgia be made members *ex officio* of the Committee.

b. That the Committee have lay *ex officio* members from the Georgia Federation of Woman's Clubs, Georgia Press Association, Georgia Federation of Labor and Georgia Association of Parent-Teachers, the organization secretary of each to be asked to designate one representative.

c. That possibility of assistance in a public relations program by an advertising agency be explored.

d. That Mrs. Shelley C. Davis of Atlanta be commended officially for her outstanding participation in the AMA Public Relations Institute, Chicago, September 4-5, 1952.

e. That Mr. Sid Wrightsman, Jr., Executive Secretary, be authorized to attend the AMA Public Relations Conference, Denver, December 1, 1952.

f. That Habersham County Medical Society be commended officially for the advertisement which appeared in a Cornelia newspaper in September, to be reproduced and furnished the membership in a newsletter mailing.

11. *Recommended* investigation into the practicality of forwarding addressed statements for 1953 membership dues to individual members via the county medical society secretaries.

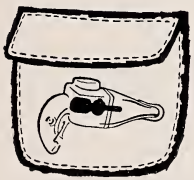
12. *Ordered* credentials of Dr. C. K. Sharp of Arlington forwarded to AMA Secretary Lull's office for consideration and his possible selection as a candidate for the award of General Practitioner of the Year, to be given at the AMA Clinical Session, Denver, during December, 1952.

Annual Session Papers

Those members of the Association who desire to present papers at The 1953 Annual Session must submit their titles *immediately*. Please mail this information to: Chairman, Committee on Scientific Work, Medical Association of Georgia, 875 West Peachtree Street, N. E., Atlanta.

—Thomas L. Ross, M.D.

Always ready to abort the Bronchospasm



easy to carry...
in pocket or purse



With this quick-acting bronchodilating powder, it is now possible for many chronic asthmatics to lead useful, happy lives. When the asthmatic feels a bronchospasm impending he can merely take three or four inhalations of Norisodrine Sulfate Powder and the attack usually subsides at once.

The patient carries this therapy with him. He uses the Aerohalor, Abbott's handy, smoke-it-like-a-pipe powder inhaler. No need to leave the job, no injections no cumbersome equipment.

Clinical investigators[1,2,3] have found Norisodrine effective against both mild and severe asthma. The drug is a sympathomimetic amine with a marked bronchodilating effect and relatively low toxicity. With proper administration, side-effects are few and usually minor.

Before prescribing this potent drug, however, the physician should familiarize himself with administration, dosage and precautions. Professional literature may be obtained by writing Abbott Laboratories, North Chicago, Illinois. Abbott

1. Kaufman, R., and Farmer, L. (1951), Norisodrine by Aerohalor in Asthma, Ann. Allergy, 9:89, January-February.
2. Swartz, H. (1950), Norisodrine Sulphate (25 Per Cent) Dust Inhalation in Severe Asthma, Ann. Allergy, 8:488, July-August.
3. Krasno, L., Grossman, M., and Ivy, A. (1949), The Inhalation of 1-(3′,4′-Dihydroxyphenyl)-2-Isopropylaminoethanol (Norisodrine Sulfate Dust), J. Allergy, 20:111, March.

Norisodrine®

SULFATE POWDER

(ISOPROPYLARTERENOL SULFATE, ABBOTT)

for use with the AEROHALOR®
Abbott's Powder Inhaler

MAG Directory Soon

A *Directory Number* of the *Journal of The Medical Association of Georgia* will be published early in 1953. It will contain names of those member-physicians who have paid MAG dues as of 1952.

Check with the Secretary of your County Society to be sure that your dues are paid and have been remitted to the MAG office.

13. *Authorized* $250 each to AMA Delegates for attendance at the 1952 Clinical Session at Denver, and general travel expense to Mr. Wrightsman for attendance thereat.

14. *Ordered* payment of one year's delinquent state membership dues by members seeking to re-establish in-good-standing status, excluding those previously on Associate membership basis, and that the Constitution and By-Laws Committee be notified to incorporate such stipulation in the By-Laws for approval at the 1953 Annual Session.

15. *Approved* plan presented by Secretary Poer to hold a conference for county and district medical society officers in January, 1953.

16. *Approved* payment of $75 participation fee in the 1953 National Conference of Presidents and by other Medical Society Officers.

17. *Approved* purchase of an electric mimeograph machine by the Association headquarters office.

18. *Authorized* payment of a $50 monthly pension, effective October 1, 1952, to disabled member of the Richmond County Medical Society.

The meeting adjourned at 5:30 p. m.

Military News

Medical Officers Recently Released From Service:

Dr. Ralph G. Newton (Capt.), 3360 Ridge Ave., Macon, Ga.
Dr. Robert Carlisle Major, (Lt. Col.), 1402 Magnolia Dr., Augusta, Ga.
Dr. Enoch Callaway, III (Lt. MC USNR) 310 Broad St., LaGrange, Ga.
Dr. Bowdre L. Carswell (Lt. MC USNR) Attapulgus, Ga.
Dr. Robert A. Clark, Jr. (Lt. MC USNR) 1059 E. Clifton Rd., N.E., Atlanta, Ga.
Dr. Fredk. W. Dowda (Lt. MC USNR), Box 97, Smyrna, Ga.
Dr. William R. Dunn (Lt. MC USNR), 2801 Andrews Drive, Atlanta, Ga.
Dr. Edward H. Estes, Jr. (Lt. MC USNR), Gay, Ga.
Dr. Thomas N. Guffin (Lt. MC USNR), Rte. 4, Box 225-G, Atlanta, Ga.
Dr. George D. Hammond (Lt. MC USNR), 217 Westminster Dr., N.E., Atlanta, Ga.
Dr. Edwin P. Lochridge, Jr. (Lt. MC USNR) 217 - 15th St., N.E., Atlanta, Ga.
Dr. Grady E. Longino (Lt. MC USNR) 1344 Lander Blvd., N.E., Atlanta, Ga.
Dr. Louis E. May (Lt. MC USNR), 817 Hickman Road, Augusta, Ga.
Dr. William P. Nicholson, III (Lt. MC U SNR), 821 Piedmont Ave., Atlanta, Ga.
Dr. William J. Oliver (Lt. MC USNR), Plains, Ga.
Dr. R. W. Penick (Lt. MC USNR), Box 503, Porterdale, Ga.
Dr. Charles Scott, Jr. (Lt. MC USNR) 94 Brighton Rd., N.E., Atlanta, Ga.
Dr. Theo. G. Thevaos (Lt. MC USNR), 960 Hickman Rd., Augusta, Ga.
Dr. Charles E. Todd, Jr. (Lt. MC USNR), 8 Mabry Rd., Atlanta, Ga.
Dr. Edward L. Myers (Capt. MC) 3015 Delachaise, New Orleans, La.

To Be Released During January, 1953:

Dr. Peter J. Cline (Capt. MC), 21 Park Circle, N.E., Atlanta, Ga.
Dr. Clyde Smith (Capt. MC), Pearson, Ga.
Dr. Robert L. McWhorter, Jr. (apt. MC), 294 Springdale St., Athens, Ga.

Civil Defense

The Federal Civil Defense Administration has requested the American Medical Association, and the American Hospital Association to suggest appropriate members of their respective organizations to form a Health Services Advisory Committee in each of its nine regions.

The Atlanta office of the Federal Civil Defense Administration, headquarters of Region III, has announced the names of those who have indicated they would serve. They are: Representing the American Medical Association, E. M. Dunstan, M.D., Atlanta, Ga., and Charles Downman, M.D., Atlanta, Ga. The Georgian representing the American Hospital Association is Edwin B. Peel, Atlanta, Ga. Representing the American Nurses Association is Mrs. Mildred B. Pryse, R.N., Atlanta, Ga. Representing the Association of State and Territorial Health Officers from Georgia is T. F. Sellers, M.D., Atlanta, Ga.

Movie Projector Sale

Five movie projectors with sound equipment in A-1 condition which originally retailed at $500 are now being offered for sale to members of the MAG *only* for $150. Contact MAG Headquarters office for details.

ACCIDENT • HOSPITAL • SICKNESS

INSURANCE

For Physicians, Surgeons, Dentists Exclusively

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000 accidental death **Quarterly $8.00**
$25 weekly indemnity, accident and sickness

$10,000 accidental death **Quarterly $16.00**
$50 weekly indemnity, accident and sickness

$15,000 accidental death **Quarterly $24.00**
$75 weekly indemnity, accident and sickness

$20,000 accidental death **Quarterly $32.00**
$100 weekly indemnity, accident and sickness

COST HAS NEVER EXCEEDED AMOUNTS SHOWN

HOSPITAL BENEFITS

	Single	Double	Triple	Quadruple
60 days in Hospital	5.00 per day	10.00 per day	15.00 per day	20.00 per day
30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	1.50	5.00	7.50	10.00

$4,000,000.00 INVESTED ASSETS

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

$18,900,000.00 PAID FOR CLAIMS

50 years under the same management

400 FIRST NATIONAL BANK BUILDING **OMAHA 2, NEBRASKA**

$200,000.00 deposited with State of Nebraska for protection of our members



HILL CREST SANITARIUM

FOR NERVOUS AND MENTAL DISEASES AND ADDICTIONS

Insulin and Electro-Shock Therapy Used in Selected Cases. Gradual Reduction Method Used in the Treatment of the Addictions

Thoroughly modern in architecture and construction. Eight departments—affording proper classification of patients. All outside rooms attractively furnished. Several bathrooms and rooms with private bath on each floor. Also a spacious sun parlor in each department. Located on the crest of Higdon Hill, 1,050 feet above sea level, overlooking the city, and surrounded by an expanse of beautiful woodland. Ample provision made for diversion and helpful occupation. Adequate night and day nursing service maintained. Catalogue sent on request.

James A. Becton, M.D., Physician-in-Charge
P. O. Box 2896, Woodlawn Station, Birmingham, Alabama

James Keene Ward, M.D., Associate Physician
Phones 9-1151 and 9-1152

News and Information

ANNOUNCEMENTS

NOVEMBER 20: The Third District Society will meet in Americus.

NOVEMBER 26: The Jefferson County Medical Society will meet at 8:00 p. m. at the Jefferson Hotel, Louisville, Ga.

DECEMBER 2: The Cobb County Medical Society will meet in the dining room of the Kennestone Hospital, Marietta.

DECEMBER 2: The Spalding County Medical Society will hold their monthly meeting.

DECEMBER 2: The Upson County Medical Society will meet at 7:30 p. m. at the Upson County Hospital. This society has recently purchased a new movie projecvtor and will show clinical films at each meeting.

DECEMBER 3: The Sixth District Society will hold their quarterly meeting.

DECEMBER 9: Colquitt County Medical Society meets for their monthly meeting.

DECEMBER 9: The Decatur-Seminole County Medical Society will hold their quarterly meeting.

DECEMBER 10: Tattnall County Medical Society will hold their quarterly meeting.

DECEMBER 11: Habersham County Medical Society will hold their monthly meeting.

DECEMBER 17: Whitfield County Medical Society will meet at the Hamilton Memorial Hospital.

MARCH 6-7: The Georgia Society of Ophthalmology and Otolaryngology will hold its spring meeting at the General Oglethorpe Hotel in Savannah, Ga., on March 6 and 7, 1953. The following outstanding, and internationally known teachers will be the speakers: Dr. Peter C. Kronfeld, Chicago; Dr. Edmund B. Spaeth, Philadelphia; Dr. Frank B. Walsh, Baltimore; Dr. Louis H. Clerf, Philadelphia; Dr. Edmund P. Fowler, Jr., New York, and Dr. Theo E. Walsh, St. Louis. Correspond with the hotel for reservations, but for any other desired information, write to the Society's secretary, Dr. Alton V. Hallum, 245 Doctors Bldg., Atlanta, Ga.

SOCIETIES

Eighth District Medical Society held its annual fall meeting October 14 at the King and Prince Hotel, St. Simon's Island, with the following scientific program: "Caeserean Section," by Dr. J. B. Avera and "Roentgen Treatment of Certain Foreign Conditions," by Dr. Bert Malone, both of Brunswick. Dr. C. F. Holton, Association President, Savannah, and Mr. Sid Wrightsman, Jr., Executive Secretary, Atlanta, addressed members present on aspects of the Association following the scientific program. The following 1953 officers were elected: Dr. Frank G. Eldridge, Valdosta, President; Dr. H. T. Adkins, Waycross, Vice-President, and Dr. Sage Harper, Douglas, Secretary-Treasurer.

Following a social hour and a seafood dinner at the Brunswick Country Club, President Holton presented an official Medical Association of Georgia Certificate of Award to Dr. J. W. Simmons, Brunswick, for his outstanding service as Parliamentarian from 1935 to 1951.

Americus and Sumter County Medical Society, at their meeting September 16, met at the Windsor Hotel and presented visiting speakers Dr. Joe Brannon and Dr. Jack Hill, both of Albany.

Glynn County Medical Society held their September meeting at the Palm Lodge and discussed preliminary plans for the *Eighth District* meeting in October. Appearing on the program as speakers were Dr. Bert Malone and local druggist G. T. Holody.

Ware County Medical Society met October 2 and devoted their meeting to the problem of raising educational funds for Georgia's Medical Schools.

Thirst, too, seeks quality

pause for sure...
be refreshed of course



Coca-Cola
TRADE-MARK ®
"Coke"
TRADE-MARK ®

Ask for it either way . . . both trade-marks mean the same thing.

COPYRIGHT 1950, THE COCA-COLA COMPANY

DEATHS

DEAL: *Dr. Ben A. Deal,* 68, of Statesboro, died at his residence after an extended illness September 24. Born and reared in the Stilson community, he had practiced in the Statesboro area for 40 years.

HAIR: *Dr. William B. Hair,* 60, retired physician of Chattooga County, died September 12 after an illness of several months. A graduate of Emory University School of Medicine, 1922, he served his internship at Memphis General Hospital, 1922-23 before coming to Summerville in 1923. Dr. Hair operated his own Summerville-Trion Hospital until his retirement in 1945.

MILLER: *Dr. Harold Applegate Miller,* 78, of Augusta, died September 22. Dr. Miller, retired surgeon and a founder of the American College of Surgeons, was a native of Alliance, Ohio.

TYRE: *Dr. J. Lawson Tyre,* 66, died October 4 in a Savannah hospital. A former president of the Wayne County Medical Society, Dr. Tyre was a graduate of Emory University School of Medicine in 1910. He had practiced medicine in Screven since that time.

PERSONALS

Dr. L. D. Arbuckle will serve as Medical Director of the Savannah Regional Blood Center of the American Red Cross.

Dr. McAlpin H. Arnold, of Elberton, left for service with the U. S. Navy, October 10. He will be stationed in the Korea area.

Dr. Robert C. Behrens, Jr., of Smyrna, has been recalled to service with the U. S. Navy.

Dr. Thomas H. Brabson, of Cornelia, was honored for his many years of service at a district Woodman of the World meeting October 21. Dr. Brabson was presented with a handsome copper plaque and a citation. Habersham County Medical Society were special guests at the meeting.

Dr. James L. Bush, of Dublin, has taken over the offices and practice of Dr. J. A. Oliver in Douglas. Dr. Oliver is retiring and will soon move to Clearwater, Florida.

Dr. W. L. Bridges announces the opening of his office at 822-24 Tift Avenue, Tifton, for a practice limited to pediatrics.

Dr. F. B. Brown, of Savannah, has been elected president of the Georgia Orthopaedic Society. Other officers named were: *Dr. T. P. Waring,* Savannah, Vice President; *Dr. C. G. Henry,* Augusta, Secretary-Treasurer; and chosen to serve on the executive committee were *Dr. Peter B. Wright,* Augusta, and *Dr. Paul Rieth,* Atlanta.

Dr. James L. Campbell, of Valdosta, has discontinued his practice of urology in Valdosta and is moving to Orlando, Florida, where he will be associated with *Dr. Louis Orr.*

Dr. John Davis Elder, of Winder, has returned to Georgia to practice after four years of study in Detroit. His new offices are in Athens with a practice devoted to obstetrics and gynecology.

Dr. Edwin Holt Etheridge, of Winder, has recently moved into new, modern offices in Winder. The building is completely equipped.

Dr. Henry C. Frech, a native of Savannah, has just returned from a tour of duty with the U. S. Army Air Force. He will locate at 427 Bull Street, Savannah, where he resumes his practice of obstetrics and gynecology.

Dr. A. L. Holloman, of Savannah, was taken ill on his way to the recent American College of Surgeons meeting in New York. Dr. Holloman was hospitalized and underwent surgery in Philadelphia.

Drs. R. Bruce Logue, J. Willis Hurst and *Clyde Tomlin,* all of Emory University, collaborated on an article, "Pitfalls in the Recognition and Management of Heart Disease," which appeared in the October issue of *American Practitioner and Digest of Treatment.*

Dr. Paul Marsh, of Savannah, announced the opening of an office in the DeRenne Apartments, Savannah. While Dr. Marsh will have independent offices, he will continue his association with *Dr. C. F. Holton* and *Dr. John G. Sharpley.*

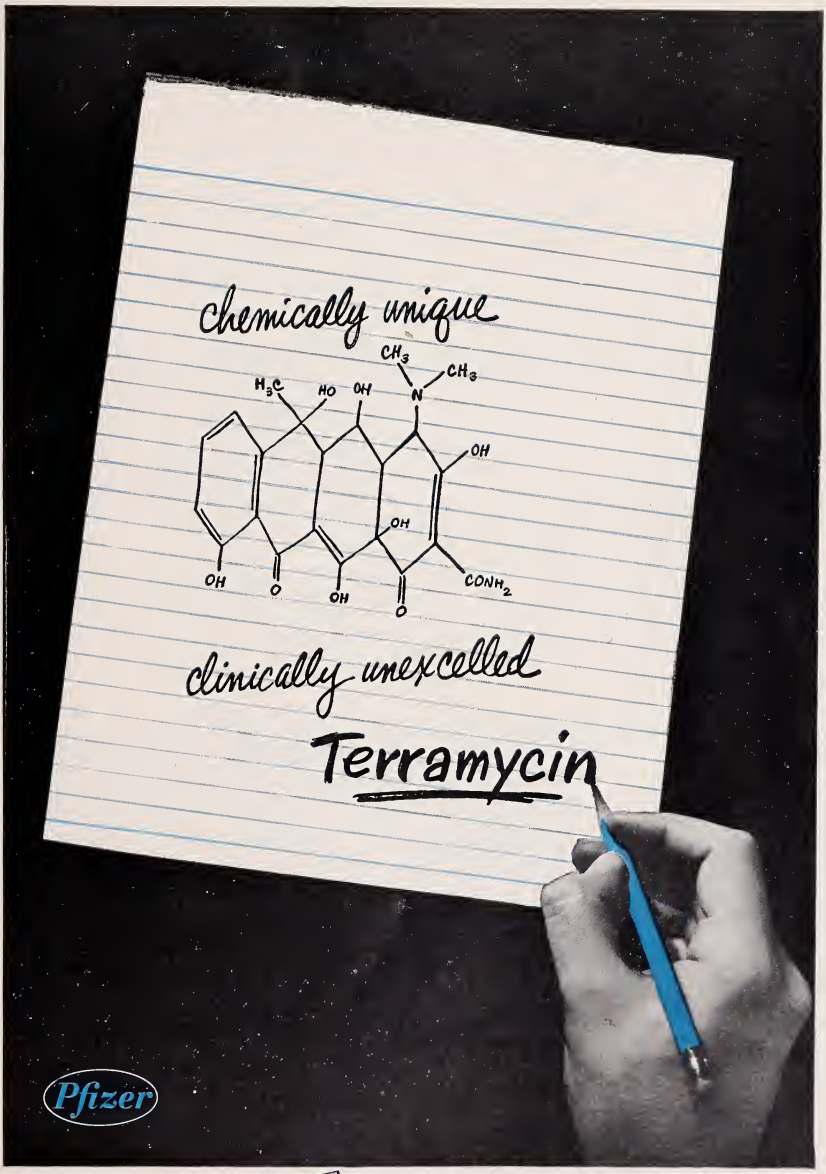
Dr. Barton A. McCrum, of Gainesville, received orders to report to active duty with the U. S. Naval Reserve. Dr. McCrum reported to duty November 7 at the Pensacola, Florida, Naval Air Station.

Dr. James J. McDonald announces the opening of his office at 455 N. Milledge Avenue, Athens for a practice limited to general surgery.

Dr. H. H. McGee, of Savannah, has been on sick leave for the past several months. *Dr. John B. Rabun* has been assisting during Dr. McGee's absence.

Dr. William W. Osborne, of Savannah, has returned from a tour of duty at the U. S. Army Air Force Hospital, San Antonio, Texas, and will resume his practice in obstetrics and gynecology in the DeRenne Apartments, Savannah.

Dr. Calvin S. Meeks, of Douglas, has reopened his office for the practice of medicine in Douglas, after



DON'T MISS 

APPEARING REGULARLY IN THE J. A. M. A.

serving with the armed forces for the past two years.

Dr. Peter L. Scardino, of Savannah, will serve as chairman of the medical division of the United Community Appeal. Dr. Scardino will supervise all solicitations from physicians and their office staffs in the city and county.

Dr. W. H. Tanner, of Newnan, was honored recently by the Rico Masonic Lodge, No. 633, for his long service.

Drs. C. V. Vansant and *C. V. Vansant, Jr.,* of Douglasville, moved into their completely remodeled new office in Douglasville.

Dr. Perry P. Volpitto, of Augusta, was chairman of the General Scientific Sessions at the American Society for Anesthesiologists, held in Philadelphia, November 11-14.

Dr. Eugene L. Ward, of Gainesville, was elected president of the Gainesville Kiwanis Club recently.

Dr. James R. Whitley has moved from Dalton to Winder where he opened his offices for general medical practice and surgery.

Dr. Robert H. Brown, Atlanta, will report on November 20 to the U. S. Naval Hospital, Bethesda, Maryland, for active duty in the U. S. Navy Medical Corps.

HOSPITALS

Dr. J. A. Thrash, Columbus City Hospital Administrator announced that arrangements had been completed for 10 interns at the hospital next year. In addition to the 10, four second-year and four advanced residents will assure the hospital of an adequate teaching staff, according to Dr. Thrash.

Plans for a six-story office building for doctors and dentists were approved recently in Augusta by the city planning commission. Construction, costing a minimum of $1,250,000, will start as soon as possible. The building will be near the University Hospital at the Medical College of Georgia.

The new Effingham County Health Building in Springfield was dedicated September 28. This building was in use for several weeks before the dedication and is designed to house a complete, modern health unit.

The town of Snellville has begun work on a community-wide project to attract a physician to a "doctorless" community. Plans call for a doctor's office building and home for the doctor.

AUXILIARY

Eighth District Medical Society Auxiliary were guests of the *Glynn County Medical Society Auxiliary* in Brunswick October 14 at the Brunswick Country Club. Mrs. Leo Smith, president-elect of the State Medical Auxiliary addressed the gathering. She spoke on the history, the purpose and the objectives of the Auxiliary organization.

Albany Medical Society Auxiliary met October 7 and presented new officers and new members. The meeting was held at Radium Springs, Albany.

Bibb County Medical Society Auxiliary met in the Sidney Lanier Cottage, Marietta on October 14. Mrs. Ralph Fowler, of Marietta, president of the Auxiliary to the Medical Association of Georgia was the guest of honor at this meeting.

Carroll, Douglas and Haralson County Medical Society Auxiliary is sponsoring an essay contest on the subject: "The Romance of a Doctor's Life." It is being done to encourage high school students in the research of medicine and medical men. Cash awards are being offered to juniors and seniors in the three connty area.

Muscogee County Medical Society Auxiliary heard Dr. Leonard T. Maholick, physiatrist, and Grant W. Husband, phychiatric social worker, discuss group psychotherapy at their September meeting. New auxiliary projects were discussed and a social hour closed the meeting.

SCHOOLS

Seven promotions in the faculties of the medical and dental schools at Emory University were announced recently by Dr. Goodrich C. White, president. Dr. Charles H. Huguley, Jr., of the medical faculty moves from associate to assistant professor of medicine; Dr. Louis P. Britt, from assistant to associate in physical medicine; Dr. Brinton B. Gay, from instructor to associate in radiology; Dr. John H. Ridley from instructor to associate in obstetrics; and Dr. Richard H. Smoot from instructor to lecturer in anatomy.

ATLANTA HOSPITALS

Offer Every Facility for the Treatment of the Sick

★

Go to an APPROVED Hospital

★

The following hospitals are registered by the Council on Medical Education and Hospitals of the American Medical Association, American Hospital Association, and the American College of Surgeons.

Crawford W. Long Memorial Hospital

Georgia Baptist Hospital

Piedmont Hospital

St. Joseph's Infirmary

Emory University Hospital
(Wesley Memorial)

One of America's Fine Institutions . . .



BROOK HAVEN MANOR . . with a well trained staff of nurses and attendants, fills the need for a high class, ethical nursing home. Convalescent and elderly patients receive individual attention in these lovely surroundings.

Alcoholics, drug addicts and mental patients are not accepted.

Rates moderate based on individual needs.

Dedicated to the welfare of the convalescent and elderly . . .
. . . In a setting of inviting friendliness and simple grace.

Elevation 1200 Feet

BROOK HAVEN MANOR SANITARIUM

STONE MOUNTAIN, GA.
MISS ELIZABETH C. HANCOCK
MRS. CARRO HENDERSON

In the dental school Dr. Gerald A. Mitchell was promoted from associate professor to professor of periodontology, and Dr. Clyde H. Harling from instructor to assistant professor of oral surgery.

The memory of the late Dr. Eugene E. Murphey will be perpetuated and tribute paid to his services to the community, by naming a building on the campus of the Medical College of Georgia the "Eugene B. Murphey Building." The building so named is next to the Dugas Building on the campus.

LETTERS

National Multiple Sclerosis Society
270 Park Avenue, New York, N. Y.
September 17, 1952

To the Editor:
Dear Sir:

I should like to call your attention to a series of pamphlets published and distributed by the National Multiple Sclerosis Society, dealing with the problems of physical medicine and rehabilitation in multiple sclerosis.

To facilitate such a program, the National Multiple Sclerosis Society, with the cooperation of Dr. Howard A. Rusk, Director of the Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center, New York City, and Dr. Edward E. Gordon (who at the time was associated with Dr. Ruck but is presently Director of the Institute for the Crippled and Disabled, New York City) prepared a manual on physical medicine and rehabilitation for multiple sclerosis patients for distribution to physicians only. From this manual, which received widespread acclaim and distribution, there arose a demand for home care program employing physical therapy and rehabilitation techniques.

Four such manuals directed to patients have been published. They are: First, for independently ambulatory patients; second, for patients ambulatory with aids—such as canes and crutches; third, for wheel chair patients; and fourth, for the care of bed patients. All of these publications are available without cost upon request of the physician, if he will designate which manuals are appropriate to the needs of his patients.

Cornelius H. Traeger, M.D.
Medical Director

1205 N. Murray Ave.
Tifton, Georgia
September 28, 1952

To the Editor:

Dr. Nealy suggested I write you, as Editor of the State Medical Journal, the following facts that might be of interest to some E. E. N. T. man looking either for a good location or in search for complete set of instruments for practice of his specialty. Dr. Andrews passed away last January, leaving these instruments which supply salesmen say are difficult to obtain. There is only one E. E. N. T. man at present in this section.

The field is wide open and the "harvest is white." The population of the city of Tifton itself is only about 8,000. But, it is the county seat, and is a center for about a 12,000 population. It is a thriving town with varied agriculture interests, good schools, churches and also a college. If you would insert a notice in the next publication of the Journal containing these facts, I would appreciate it very much.

Sincerely yours,
Louise B. Andrews.
(Mrs. Agnew Andrews)

BOOKS

REVIEWS

CARDIAC THERAPY, by Harold J. Stewart, M.D., Associate Professor of Medicine, Cornell University Medical College, New York; Attending Physician, New York Hospital; Head of Division of Cardiology, Department of Medicine, New York Hospital-Cornell Medical Center. 622 pages. New York: Paul B. Hoeber, Inc. Medical Book Department of Harper & Brothers, 1952. Price $10.00.

This book is a thorough study of diseases of the heart with the indexing and text based primarily on therapy. In this way it differs from usual books of cardiology. Occasional repetition exists because of discussion in more than one part of the book on the treatment of certain symptoms, but this is handled readily with a full index.

An attempt is made to give treatment in detail so that a physician unfamiliar with such care may easily



so many *new* things in this *new* supplement . . .

For almost forty years now the Picker X-Ray Accessories Catalog has been the standard of reference for materials used in radiography, fluoroscopy, and radiation therapy. You will find it on thousands of doctors' bookshelves.

But even in the short time since the last 200-page edition (its fourteenth), Picker has introduced so many new things—the Picker-Polaroid process, for example, which delivers a finished dry radiograph *within a minute after exposure* . . . the Darex FlexiCast "quick-freeze" Immobilizing Cast—*dozens* of things like that—that we now find it necessary to issue a 48-page supplement to include them all.

We'll be glad to send you the supplement if you already have the current Picker Accessory Catalog. Or *both*, if you don't. Either way, you'll keep abreast of recent developments in this eventful field.

Picker X-RAY

one source for everything in x-ray

PICKER X-RAY CORPORATION
25 S. Broadway | White Plains, N.Y.

ATLANTA, GA., 1477 Spring St., N. H.

SAVANNAH, GA., 1706 7, Park Avenue

1952 Dues

Have you paid your 1952 dues? Check with your County Society Secretary today. MAG books close as of December 31, 1952.

follow directions. This includes both the use of drugs and certain physical procedures. The author reminds the reader that controversy may exist on some recommendations and such is true, but no one should go astray following the recommendations of this book.

The arrangement of the book makes it more amenable to reference reading or a study of specific problems rather than an over all reading. This, however, does not detract from its readability. The chapter on congestive heart failure thoroughly covers this symptom complex and in slight degree mentions types of heart disease which are more completely covered in other chapters with etiological titling. The important chapters of coronary artery disease and angina pectoris are well handled and carry practical value. In no less degree the more unusual forms of cardiac disorder like adhesive pericarditis and myxedema heart are discussed.

Included in the book are chapters on the management of heart disease in relation to surgery and the effect of electrolyte changes in blood on heart and circulation. These chapters should be of interest to all physicians handling surgical patients and striving for less morbidity and mortality in the poor risk groups.

For those who find it difficult to keep the varied aspects of cardiac therapy in mind, this book is an excellent and thorough reference.

T. Sterling Claiborne, M.D.

BRAIN SURGERY, by William Sharpe, M.D., Director of Neurosurgery, Manhattan General Hospital, New York; Consultant in Neurosurgery at Gouverneur Hospital, Jamaica City Hospital, Nassau Hospital, Mineola, L. I.; Vassar Brothers Hospital, Poughkeepsie, N. Y.; Monmouth Memorial Hospital, Long Branch, N. J.; Ann May Hospital, Spring Lake, N. J. 271 pages. New York: The Viking Press, 1952. Price $3.75.

This is a book written by a 75-year-old man who grew up medically during the period when rapid advancements in brain surgery were being made. Starting as a preacher's son who learned early to have money stick to his fingers (a facility which made possible a year in Europe between College and Medical School), then as a medical student at Harvard and as a houseman in New York City and Baltimore, this doctor had the opportunity of a year in China working against difficulties. Most of Dr. Sharpe's professional experiences are laid against the background of New York medicine from 1913 to the present. His reminiscences of other neurological surgeons are quite sparse.

If there be a single main theme in his book, it is the plea that the child with a birth injury be given the opportunity of repeated spinal drainage to help get rid of the blood over the surface of the brain. One of the major worries in taking Dr. Sharpe's theorem too close to home, is the fact that he repeatedly combines the appearance of increased intracranial pressure in the eyegrounds and immediate spinal puncture. Certainly, such a policy of repeated punctures in the presence of increased intracranial pressure must have produced a moderate number of deaths from insisural or foramen magnum herniations.

Dr. Sharpe's concern for those who are not so fortunate is to be commended and particularly his contributions to the aid of Colored School Teachers in North Carolina and to the children helped by the New York Herald Tribune's Fresh-Air Fund to go to summer camp, are most commendable. His efforts to further Pan-American relations sound quite glowing.

This is a book that is quite enjoyable and easy to read. Some of the principles which he propounds, particularly in the presence of increased intracranial pressure, are apt to be dangerous if followed too closely.

Charles E. Dowman, M.D.

PARDON MY SNEEZE, by Milton Millman, M.D., Fellow American Academy of Allergists, Member American Academy of Allergy. 217 pages. San Diego, Calif.: Frye and Smith, Ltd. 1952.

This little paper bound volume of 217 pages is an attractive manual for the layman. It explains in simple terms the machinism of allergy, the basic immunological principles and what the physician can do about it. The cooperation of the patient is shown to be the critical factor between success and failure in controlling allergic symptoms.

Fully half of the book is devoted to food allergy, which seems a little too much to those of us who believe that foods are over stressed with the average allergic patient. Six chapters are devoted to recipes for wheat, egg and milk free dishes. Most of them sound rather appetizing with the exception of Carrot Marmalade and Jellied Prunes.

The allergic patient frequently is presented with a list of his sensitivities and very little instruction about avoidance of the offending allergens. Dr. Millman has devoted several chapters to specific instructions about dust, flax-seed, feathers, etc. and the allergic individual can follow a program with much more ease by perusing this book.

The general format is good and the material is presented logically and simply. The book is highly recommended for the allergic patient.

Clarence Law, M.D.

RADIOLOGIC DIAGNOSIS OF THE LOWER URINARY TRACT, by Donald E. Beard, M.D.,

BALLARD'S

Dispensing Opticians

WALTER BALLARD OPTICAL CO.

THREE STORES

105 PEACHTREE STREET, N. E.
MEDICAL ARTS BUILDING
W. W. ORR DOCTORS BUILDING

HIGHLAND HOSPITAL, INC.

Founded in 1904

ASHEVILLE **NORTH CAROLINA**



Affiliated with Duke University

A non-profit psychiatric institution, offering modern diagnostic and treatment procedures—insulin, electroshock, psychotherapy, occupational and recreational therapy—for nervous and mental disorders.

The Hospital is located in a sixty-acre park, amid the scenic beauties of the Smoky Mountain Range of Western North Carolina, affording exceptional opportunity for physical and nervous rehabilitation.

The OUT-PATIENT CLINIC offers diagnostic services and therapeutic treatment for selected cases desiring non-resident care.

R. CHARMAN CARROLL, M.D., *Diplomate in Psychiatry. Medical Director.*

ROBT. L. CRAIG, M.D., *Diplomate in Neurology and Psychiatry. Associate Director.*

Play Ball . . .

The doctors and nurses of the Griffin-Spalding County Hospital played a benefit softball game at the City Park in Griffin to raise funds to pay for a new oxygen tent for the hospital. Both the Spalding and Griffin bands were on hand for the occasion and gate prizes were awarded.

William E. Goodyear, M.D., Assistants in Urology, Emory University School of Medicine, and H. Stephen Weens, M.D., Professor and Chairman, Department of Radiology, Emory University School of Medicine. First edition. Cloth. $6.50. Pp. 150, with 280 illustrations. Charles C. Thomas, 301 East Lawrence Ave., Springfield, Ill.

An internist, down on his diagnostic luck, recently commented that a urologist can "drain something out and squirt something in" and nearly always come up with a remarkably accurate diagnosis. The authors of this book demonstrate the manner in which readily adaptable methods of using contrast media uncover significant lesions of the lower urinary tract. While no particular claim of originality is made, this volume is original in that their experience in this field is unsurpassed.

The techniques for urethrography and cystography are presented with a practical simplicity which belies their more widespread employment. The authors aptly point to these valuable procedures as supplements to other methods of urological examination in most conditions, but they also call attention to conditions in which urethrography and cystography alone furnish all information necessary for an accurate diagnosis. The latter is notably true in traumatic rupture of the urethra and bladder. Many pathological lesions of the lower urinary tract can be removed from a position of relative obscurity by these techniques. Attention is called to the informative graphic record which may be used as a basis for the best possible management (as well as for medico-legal purposes).

The authors have compiled a superbly illustrated atlas for urologist and roentgenologists. However, it may well prove most valuable to the practitioner who has need only occasionally for this type of visualization of the lower urinary tract. This is especially true regarding accurate interpretation of the resulting radiograph. The brief large type text is concise and remarkably adequate. There are 280 excellent reproductions of original radiographs. A number of these possess superimposed anatomical sketches by artist Kathleen Mackay leaving little chance for erroneous interpretations by the reader.

Most of the material in the book was secured while the urological authors were serving their residences at a large municipal charity hospital where an endless source of clinical material was available. The experience gained in 2,000 case studies has been attractively condensed into a ready source of information for the convenience of the busy physician.

The pleasant opportunity of reviewing a book authored by members of our Society does not often come to one of us. Drs. Beard, Goodyear, and Weens have made a notable contribution to the medical literature. Those who occasionally contribute a scientific article for publication can partially appreciate their accomplishments, while at the same time being occupied with a busy practice.

CHARLES EBERHART, M.D.

ESTUDOS CIRURGICOS 6TH SERIE SAO PAULO EDITORA S.A. 1952, by Eurico Branco Riberio, M.D.

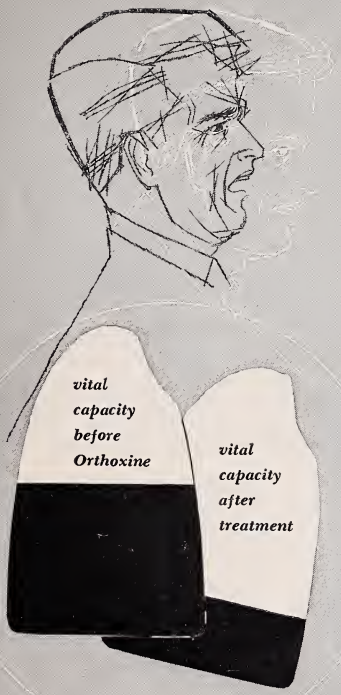
The author, a competent and very well known surgeon of S. Paulo, Brazil, collected in this book 29 of his articles, published since 1946 in several medical journals. He considers the various subjects from a practical point of view and gives his opinion of the rationale and technic in various fields of surgery. The important ones deal with the gastric surgery. The wide range of topics illustrates that a practicing surgeon can employ other than direct surgical techniques in his practice.

ANTONIO MONTEIRO CARDOSO DE ALMEIDA, M.D.

THE TOXEMIAS OF PREGNANCY, by William J. Dieckmann, S. B., M.D., Professor and Chairman of the Department of Obstetrics and Gynecology, University of Chicago; Chief of Service of the Chicago Lying In Hospital; Attending Gynecologist, Albert Merrit Billings Memorial Hospital, University of Chicago; Associate Editor of the American Journal of Obstetrics and Gynecology. Second Edition: 710 pages, 86 illustrations. St. Louis: C. V. Mosby Co., 1952.

The appearance of a second edition of this painstaking work is timely. The author has preserved the excellent arrangement of his 1941 edition, but has largely re-written each capter. A nicety of balance between smooth reading, clearness and adequately detailed background conforms to Dr. Dieckmann's customary style of presentation.

This "toxemia bible" should be added to the libraries of institutions, departments and practitioners of obstetrics. Particularly should it be studied by young physicians in training or starting their practice. It appears that many recent graduates, some from good residencies, approach the differing types, stages, and degrees of gestational toxemia with a fixed concept of entity and an almost inflexible congeries of procedure, unwarranted by facts. A careful perusal of this book tends to dispel copy-book assumptions of specific virtues attributed to a particular routine currently in favor where the student has trained. The author reconciles practical application with basic principles, citing in detail the varied findings, inter-



an answer to asthma

Q. Is there a sympathomimetic agent that will give relief from asthma without causing vasopressor and psychomotor stimulation?

A. Orthoxine Hydrochloride provides bronchodilatation with minimal vasopressor and psychomotor stimulation. By modifying the configuration of a sympathomimetic amine molecule, the action of Orthoxine has been centered mainly upon bronchodilatation, thereby minimizing side-effects arising from vasopressor or psychomotor-stimulating activity.

Orthoxine*

HYDROCHLORIDE

BRAND OF METHOXYPHENAMINE

Bottles of 100 and 500 tablets.

Orthoxine Hydrochloride (100 mg.) tablets contain *beta-(ortho*-methoxyphenyl)-isopropyl-methylamine hydrochloride, a bronchodilator and antispasmodic.

For Adults: ½ to 1 tablet (50 to 100 mg.)

For Children: half the dose

For Both: Repeat every 3 to 4 hours as required

* *Trademark, Reg. U. S. Pat. Off.*

Upjohn *Medicine . . . Produced with care . . . Designed for health*

THE UPJOHN COMPANY, KALAMAZOO, MICHIGAN

pretations and methods of treatment of other authorities, in addition to his own vast experience.

As compared to the 500 page original monograph, the present volume has been expanded to 700 pages, despite obvious efforts to conserve space by contracting or omitting parts of the older text. The increase in size is not a handicap. Rather might it be said that certain deletions are to be regretted. For example Kosmak and a few others have disappeared from the excellent list of monographs, and the Stroganoff and Rotunda treatments are mentioned without description. For reasons, not entirely nostalgic, this reviewer ventures to hope that succeeding editions will restore in the bibliographic and historical portions these and similar classic contributions. For obviously this book, itself a classic, will contitute a major reference for source material in the field.

The sections on clinical aspects and treatment are revised with additions too numerous to list. The reader's attention is also directed to chapters two, 13, 14 and 15, which cover ecology, epidemiology and etiology, to an extent unequaled by any other compilation.

Hugh J. Bickerstaff, M.D.

CULDOSCOPY, by Albert Decker, M.D., D.O.G., F.A.C.S. W. B. Saunder Co., Philadelphia. Monograph. 148 pp. 50 figures and illustrations.

This monograph on the practice of culdoscopy is comprehensive and long overdue. Although there have been many articles written by Decker and others since this instrument was first described and used in 1943, this is the needed resume of its technique of use, applicability, indications and limitations. This book, in its detailed descriptions, is not only a guide for the novice culdoscopist but lends valuable suggestions to the most experienced operator.

The author does not give the impression of an effort to "sell" the technique, which by now has become accepted to be a valuable gynecologic diagnostic adjunct. For the most part Decker elaborates on the practical application of the culdoscope, then also describes the use of the instrument in the field of research and in those of less common application.

The presentation of the practice of the use of the culdoscope in operative rather than diagnostic work is not convincing that this will be a widely accepted practice. It is felt by this reviewer that operative culdoscopy has a limited application because of the obvious danger of hemorrhage and limited facility of manipulation of instruments and of the pelvic viscera.

The chapters on the allied procedures of colpocoeliocentesis and pneumoperitoneum are detailed and informative. The history of intra abdominal endoscopy and the evolution of the culdoscope make interesting reading. The final chapters dealing with the research possibilities of determinations of time of ovulation and ovum transfer, and culdoscopic photography are stimulating. The case reports are adequately illustrative.

This monograph will be a valuable addition to the reference shelf of the practicing gynecologist.

John Ridley, M.D.

PRINCIPLES OF REFRACTION, by Sylvester Judd Beach, M.D. Published by C. V. Mosby Co., St. Louis. 1952.

There are many books on refraction and their approach and presentation varies widely with the authors. Dr. Beach has taken a difficult, complicated subject in many respects and made it simple, clear and lucid. Not only will it be well received by the beginner who can understand easily the context, but also by the experienced refractionist who will pick up many fine points in this book. The wide experience of the author makes the methods that he presents workable for everyone.

Two chapters especially should be mentioned: "Practical Optics," which his illustrations make so simple that there is no difficulty for the beginner, and the fine chapter on "Ocular Neuroses," which is a welcome addition to our literature on refraction. It gives a very keen insight to the many problems of the refractionist and also outlines the definite responsibility of the ophthalmologist to his patients.

In general, the book is simple, concise and practical and should be well received by the novice and the experienced clinician alike.

J. Mason Baird, M.D.

MISCELLANY

At a meeting of doctors and druggists of Southeast Georgia from practically every community in Southeast Georgia, held in Jesup, the guest speaker was Edward Tomlinson, who spoke on "Doctoring a Sick World." Mr. Tomlinson, noted author and lecturer, and winner of the Cabot Gold Medal awarded by Columbia University for "distinguished journalism" is one of Jesup's and the nation's outstanding authorities on Latin America.

The Fall Meeting of the Communicable Disease Center, FSA, was held October 13-15 at the Fulton County Academy of Medicine, Atlanta.

The Georgia Urological Association in joint session with the Georgia Chapter American College of Surgeons met at Columbus, October 28, and with the Georgia State Obstetrical and Gynecological Society on October 29.

The Georgia Academy of General Practice held its fourth annual meeting at the Idlehour Country

EAGER & SIMPSON
SURGICAL CORSETS
ABDOMINAL SUPPORTS
UPLIFT BRASSIERES, ETC.
24 CAIN ST., N. E. ATLANTA, GA.
WAlnut 4972

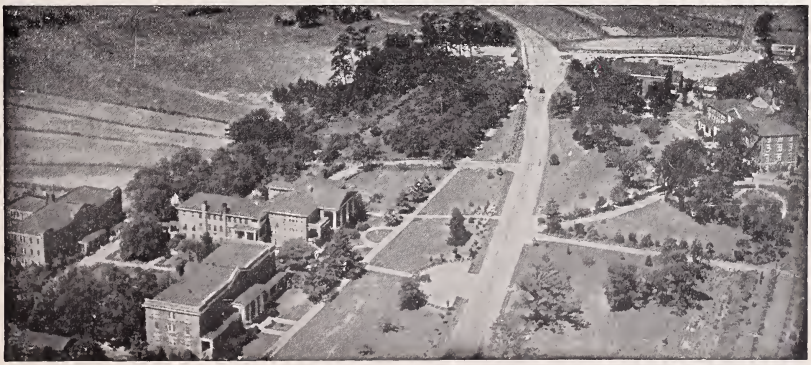
ESTES SURGICAL SUPPLY COMPANY
Phone WAlnut 1700-1701
56 Auburn Avenue, N. E.
ATLANTA, GA.

City View Sanitarium

For the diagnosis and treatment of mental and nervous disorders, alcoholism and drug addictions.

Established in 1907 by the late John W. Stevens, M.D. 52 acres near city. Separate buildings for men and women. Two full time psychiatrists. Electric shock and insulin therapy in selected cases. Occupational therapy. Physiotherapy department. Adequate laboratory facilities.

NASHVILLE, TENNESSEE



ALLEN'S INVALID HOME *Milledgeville, Ga.*

FOR NERVOUS
and
MENTAL DISEASES

• E. W. ALLEN, M.D., Physician in Charge Department for Men

• H. D. ALLEN, M.D., Physician in Charge Department for Women

Club, Macon, October 23, with the following scientific program: "The Present Status of the American Academy of General Practice on Good Medical Care," Dr. J. P. Sanders, Shreveport, La.; "The Future of the General Practitioner," Dr. Paul Williamson, Memphis, Tenn.; "The Diagnosis and Treatment of Alcoholism in General Practice," Dr. Andrew S. Tomb, Seminole, Texas; "Treatment of the Low Back and Sciatic Syndrome," Dr. Eugene M. Regen, Nashville, Tenn., and "The Diagnosis and Management of Urinary Calculi in General Practice," Dr. Major F. Fowler, Atlanta.

At the morning business session, the following 1953 officers were elected: Drs. Peter Hydrick, College Park, President; H. L. Cheves, Union Point, President-Elect; George H. Alexander, Forsyth, Vice-President; Maurice F. Arnold, Hawkinsville, Secretary-Treasurer; W. G. Elliott, Cuthbert, and J. B. Kay, Byron, Directors; and Fred Simonton, Chickamauga and T. A. Sappington, Thomaston, Delegates.

Awarded honorary membership in the GAGP were Drs. G. Lombard Kelly, President, Medical College of Georgia, Augusta, and R. Hugh Wood, Dean, Emory University School of Medicine, Emory University.

Presentation of the past-president's gold key to retiring President A. R. Bush, Dublin, was made by Dr. Hydrick during the afternoon scientific program.

Medical and Legal Professions Meet

The officers and executive committee of the Atlanta Bar Association invited the officers and trustees of the Fulton County Medical Society and the MAG for dinner and a joint meeting to discuss mutual problems of the medical and legal professions.

Items discussed were the civic obligation for the doctor to testify, when called upon, in behalf of the patient in the court of law; the need for a medical coroner system in Fulton County and the problems of law suits against doctors. Also discussed was the need for an "injunction" type law to closer control the "easy cure" so-called doctor who practices without having the qualifications of the profession.

It was recommended that a liaison committee be set up to work out solutions to these problems.

Diabetes Ass'n. Award

The American Diabetes Association offers a $250 prize to medical students and interns for a paper on any subject relating to diabetes. The paper can be a report of original studies, a biographical or historical note, a case report with suitable comment, or a review of the literature.

Manuscripts must be submitted on or before April 1, 1953 to the Editorial Offices of DIABETES, The Journal of the American Diabetes Association, 11 West 42nd Street, New York 36, New York. The award has been made possible through the generosity of the St. Louis Diabetes Association.

Equen Memorial Lecture

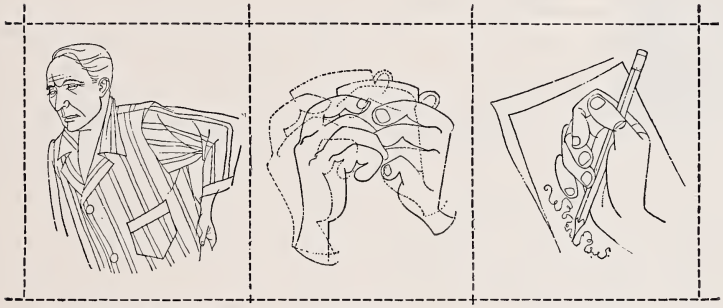
December 4: The Jonte Equen Memorial Lecture will be delivered on December 4th by Dr. Julius Lempert, internationally noted otologist of New York City, on "Otology: Its Present Status."

His scores of scientific papers have contributed much to the progress of medical science and he is internationally known for his work in developing the fenestration operation. Dr. Lempert is the director of otologic surgery and postgraduate teaching at the Lempert Institute of Otology in New York City where courses in endaural bone surgery and the fenestration operation are given.

This lectureship was established by Dr. Murdock Equen in memory of his father, the late Jonte Equen, a New Orleans grain broker.

The lecture will be held at the Academy of Medicine at eight o'clock and is open to the public. It will follow the semi-monthly dinner of the society and refreshments will be served following the lecture.

new uniform oral dosage



in muscle spasm of rheumatic disorders | **in acute alcoholism** | **in certain neurologic disorders**

The new, uniform oral dose for adults is 1-3 grams. This may be repeated 3-5 times per day.

The first dose prescribed should be at the lower end of the recommended dosage range *(an occasional patient may complain of side effects when* large *doses are given at the* start *of Tolserol therapy).* Subsequent doses may be adjusted to the needs of the individual patient. Whenever possible, Tolserol should be given after meals. When Tolserol is given between meals, it is desirable that the patient first drink ⅓ glass of milk or fruit juice.

Tolserol

Squibb Mephenesin

Tablets, 0.5 Gm. and 0.25 Gm., bottles of 100; *Capsules,* 0.25 Gm., bottles of 100; *Elixir,* 0.1 Gm. per cc., pint bottles; *Intravenous Solution,* 20 mg. per cc., 50 cc. and 100 cc. ampuls.

SQUIBB

'TOLSEROL' (REG. U. S. PAT. OFF.) IS A TRADEMARK OF E. R. SQUIBB & SONS



Doctor's Bulletin Board

By David Henry Poer, M.D.
MAG Secretary-Treasurer

At a recent Washington meeting of the Medical Military Consultant's Society which I and another representative from Georgia attended, we discussed some of the vital problems of physicians and the draft. Let's look at how the situation stacks up at the present time.

Some 90 per cent or more of the doctors in Priority I are now in uniform and the rest are under increasing pressure so that their days in civilian life are numbered. Priority II is also almost exhausted and will be depleted very soon. Although questionaires are being sent to physicians in Priority III, there aren't enough eligible doctors in Priority III to meet military requirements.

The Armed Forces are 1,300 physicians short at present, and during the next year, the bulk of this shortage will have to come from Priority III and IV. Priority IV doctors, whose age and experience level make them more acceptable cannot be called until Priority III men are used up—and it is possible that a high percentage of these men already have two years active military service.

It was our feeling that men in the Priority III group, not having earlier military service, who can possibly make arrangements should request commissions in the reserves and be called as needed. This would ease the situation, somewhat.

Recommendations at the meeting were: $100 incentive pay be continued; Armed Forces make full use of its medical personnel and reduce service to dependents to a minimum and confined to locations where other medical service is unavailable; category classified as "limited service" be reestablished to examine availability of physicians with non-disabling physical defects that do not interfere with regular practice; and that when the Armed Forces do not require the full-time services of their physician, the job be turned over to a civilian physician in the area on a part-time or contract basis.

Since the present draft law will expire in June, 1953, a new law will undoubtedly be passed by the 83rd Congress which convenes in January. Recommendations have already been made to plug certain weaknesses in the present law, especially in reference to local draft boards that refuse to cooperate with the recommendations of the Medical Advisory Committee of the State.

About Our Contributors

Lester Rumble, Jr., M.D.; A. V. Gude, M.D. and W. H. Galvin, M.D., all of Atlanta, are co-authors of the paper "Anesthesia For Peroral Endoscopy." Dr. Rumble, a graduate of Emory University School of Medicine in 1945, is Director of Anesthesiology at St. Joseph's Infirmary, Atlanta. Dr. Gude, Associate Director of Anesthesiology at St. Joseph's Infirmary, graduated from Johns Hopkins in 1946. Dr. Galvin, Associate Professor of Anesthesiology at Emory University, graduated from the University of Vermont Medical College, 1937. Dr. Galvin served as a major in the U. S. Army M. C. from 1942-46. He is a Fellow of the ACA.

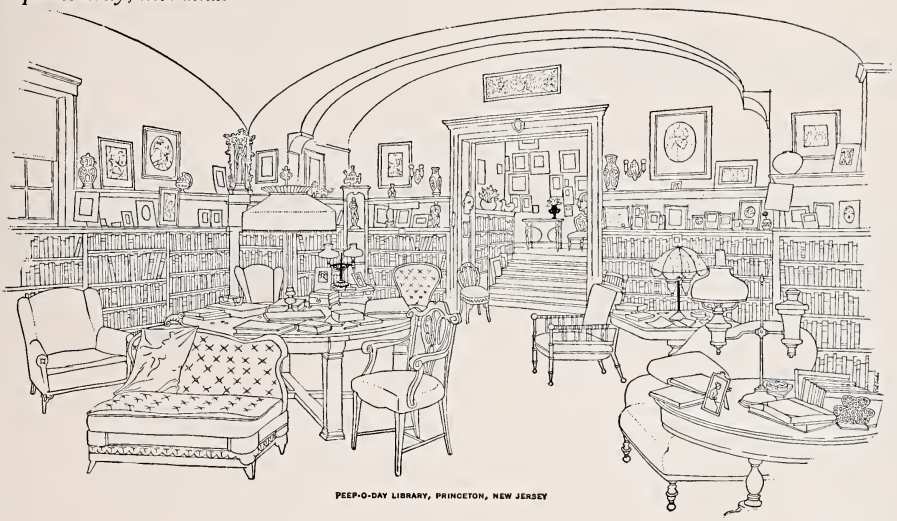
Maurice F. Arnold, M.D. and William R. Baker, M.D., of Hawkinsville, collaborated on the article "Abdominal Pregnancy With Survival of Mother and Infant." Dr. Arnold is a graduate of the Medical College of Georgia, 1943, and Dr. Baker graduated from Emory University School of Medicine in 1937.

Duncan B. McRae, M.D., of McRae, contributed the article "Familial Polyposis. Dr. McRae is a graduate of the Medical College of Georgia, class of 1942.

Arthur M. Knight, Jr., M.D., of Waycross, is the author of the article "Temporal Arteritis, Report of a Case with Pleocytosis and Total Blindness." Dr. Knight is a graduate of the Medical College of Georgia, 1943.

Paul Lucas, M.D., of Tifton, who wrote the article "Otitis Externa Etiology and Treatment," graduated from Duke University School of Medicine in 1939.

New aureomycin minimal dosage for adults—four 250 mg. capsules daily, with milk.



PEEP-O-DAY LIBRARY, PRINCETON, NEW JERSEY

a low cost antibiotic in the broad-spectrum field is

AUREOMYCIN

Hydrochloride Crystalline

because

Low dosage of aureomycin has very frequently been reported in the literature to be entirely effective.

Small amounts of aureomycin may reduce disability, or hospital stay, to a few days.

Early use of aureomycin may forestall those failures that have been reported in the literature following penicillin and streptomycin.

The proven range of clinical usefulness of aureomycin is so wide that, when clinical diagnosis is established, prolonged and costly laboratory studies are largely unnecessary.

Capsules: 50 mg.—Vials of 25 and 100.
100 mg.—Vials of 25 and bottles of 100.
250 mg.—Vials of 16 and bottles of 100.

Ophthalmic Solution: Vials of 25 mg.; solution prepared by adding 5 cc. distilled water.

LEDERLE LABORATORIES DIVISION *American Cyanamid Company* 30 Rockefeller Plaza, New York 20, N. Y.

MEDICAL ASSOCIATION OF GEORGIA

Annual Meeting

SAVANNAH

May 10-13, 1953

Papers for Presentation

Those members of the Association who desire to present papers at The 1953 Annual Session must submit titles **immediately.** Please mail this information to: Chairman, Committee on Scientific Work, Medical Association of Georgia, 875 West Peachtree Street, N.E., Atlanta.

Scientific Exhibits

The space available for scientific exhibits is somewhat limited. If you would like to apply for space, please write to the office of The Medical Association of Georgia, 875 West Peachtree Street, N.E., Atlanta. To be given consideration by the Committee on Scientific Work, these applications must be filed as soon as possible with this office.

SCIENTIFIC PAPERS . . .

. . . SCIENTIFIC EXHIBITS

REMEMBER THE DAY

THE 10-13TH OF MAY

Index of Advertising

NOVEMBER, 1952

VOLUME XLI NUMBER 11

Abbott Laboratories 511
Adams-Cates Co. 501
Allen's Invalid Home 527
American Meat Institute 8
Ayerst, McKenna & Harrison 503
Baker Laboratories 16
The Bayer Company 7
Walter Ballard Optical Co. 523
Blackman's Sanatorium 505
Brawner's Sanitarium 10
Brook Haven Manor Sanatorium 519
City View Sanitarium 527
Coca-Cola Co. 515
Eager & Simpson 527
Emory University Hospital 519
Estes Surgical Supply 527
Georgia Baptist Hospital 519
Highland Hospital 523
Hill Crest Sanitarium 513
Earle Johnson Sanitarium 505
Lane Rexall Drug Stores 501
Lederle Laboratories 531
Eli Lilly & Co. ..... First Cover, 19 and 20
Crawford Long Memorial Hospital 519
Luzier's, Inc. 18
Marshall & Bell 499
R. L. Mathis Certified Dairy 505
Mead Johnson & Co. ..... Fourth Cover
Merck & Co. 9
New York Polyclinic 509
Parke, Davis & Co. ..... Second Cover and 3
Chas. Pfizer & Co. ..... 12 and 517
Philip Morris & Co. 507
Physicians Casualty Association 513
Picker X-Ray Corp. 521
Piedmont Hospital 519
Pineworth, Inc. 10
Provident Life & Accident Ins. Co. 499
R. J. Reynolds Tobacco Co. 11
Sandoz Pharmaceuticals 14
Schering Corp. 17
G. D. Searle & Co. 533
E. R. Squibb & Sons 529
St. Joseph's Infirmary 519
Upjohn Co. 525
U. S. Brewers Foundation 14
U. S. Vitamin Corp. 6
Westbrook Sanitarium 509
Winthrop-Stearnes, Inc. 15
Wyeth, Inc. 13
Classified Advertising 499

THE JOURNAL
of the MEDICAL ASSOCIATION OF GEORGIA

VOLUME XLI DECEMBER, 1952 NUMBER 12

Editorials

The ARTIFICIAL KIDNEY

An artificial kidney has been given to the Emory Department of Internal Medicine by the U. S. Public Health Service Division of Research Grants and Fellowships. While it will be employed primarily for research, the fact that it is the only one in the South below Washington, D. C., makes it necessary that the kidney be made available for patients with conditions in which dialysis is known to be life saving. At present, the kidney is situated at Grady Hospital. Private patients will be transferred by ambulance to the room where the kidney is placed, will be dialyzed for six to eight hours and then returned to their private hospital. When space is not available in the private hospital for a patient with an emergency need, proper financial arrangements must be made with the superintendent at Grady Hospital before the patient is sent to Atlanta. Private hospital facilities should be negotiated for with a private physician who is a staff member of that hospital. All patients who are accepted for observation in deciding upon the value of the kidney in each individual case may not be thought to be suitable for dialysis, and it may be well for the patient or his family to be so informed. Otherwise, unpleasant misunderstandings may occur.

Since the artificial kidney was given for use in research, it will be necessary for its use in private patients to be self-supporting or it will not be possible to continue its operation. The personnel and material necessary to operate the kidney will cost about $25,000 a year, and it is estimated that 25 to 50 private patients in this area will need the kidney each year. Thus the cost for each patient would be $1,000. However, the personnel will also be occupied to a major extent with research, and a fee of $200 to the private patient for each dialysis has been settled upon. This is exclusive of the two pints of blood required for each dialysis. While it was hoped that some of the expense for indigent patients might be borne by one or more foundations, no such arrangement exists at the present time. Therefore, it is incumbent upon each physician to make arrangements in his locality to help us bear this expense through either private, public or charitable funds. No patient will be refused aid because of inability to obtain such funds, but it should be clear that unless such funds are forthcoming it will become impossible to continue the operation of the kidney. Research funds cannot be expended for this purpose. It should be apparent that all of this fee will be used for the operation of the kidney. This will not include professional fees for care of the patient before and after dialysis. It will include professional and nursing care while actual dialysis is in progress.

At present, dialysis is known to be life saving in anuric or oliguric subjects in which potassium intoxication ensues. It may also be life saving in oliguric individuals in which fluid and electrolyte management has gone awry. It is used in most patients who have remained oliguric as long as nine days because sudden fatal potassium intoxication may occur after this time or even before. It

may be used temporarily to tide over a patient who is to be or already has been subjected to renal surgery while the other kidney is undergoing compensatory hyperplasia. It may be of value in preparing patients for surgery where obstructive renal failure exists when there is reasonable hope of restoring renal compensation. It has been used in patients with chronic uremia without prospect of re-establishing renal compensation. The results in chronic patients are variable. In many, no benefit is derived. In some, relatively asymptomatic periods of six to nine months have followed dialysis. The reason for this is not clear and will be one of the subjects of investigation. In general, it may be said to be useful in any patient who has a reversible renal failure (not correctable by conservative fluid and electrolyte management), whether reversible by surgical, medical or natural means.

Inquiries regarding its use in private patients should be made at Grady Hospital, Department of Medicine.

ARTHUR J. MERRILL, M.D.

OF

PROFESSIONAL ETHICS

This is perhaps not a new story, but it is always a tragic story—and it is recorded here in the form of a letter as received by the Executive Secretary of The Medical Society of another State. It is published as proof of what *can* happen here in the profession.

Dear Sir:

My daughter, who is an unfortunate cancer victim, has been taken to a medical doctor in ....., Georgia, who claims to know the *cause* and the *cure* of cancer without radium or surgery. People who know even the rudiments of medical progress in cancer research, *know* that this claim can cost the life of my daughter! Two doctors have agreed that cancer was present, and she was scheduled for surgery, as soon as a bed could be procured, but through other sources, this "doctor" was recommended, and her husband and daughter, both members of that sect (not my daughter), rushed her away at 4:00 a.m. without seeking advice or determining the ethics of this gentleman! About that, I can do nothing, but I do sincerely want to determine if such is possible; whether the "doctor" is practicing in a legitimate fashion.

My daughter writes that she is in his private home, a "rest home", and that he and his wife do all that is done for her and another patient who is there. No mention is made of a nurse or any facilities, beyond those *any* private home would offer. He has diagnosed her case as, to quote her own words 'bovine tuberculosis and Bang's disease and cancer' (of the ueterus). He has told her an operation would not help the condition as she is, or will be on the verge of a mental collapse, if the other conditions are not taken care of.

I am not in a position to dispute his diagnosis, nor to say, with any authority, that her welfare is in jeopardy, but I question the entire methods and procedure. He, the 'Doctor,' told her, quite frankly, that the American Medical Association does not recognize his treatment for cancer, but assured her that thousands of his "cancer patients" had been cured! I am skeptical.

Could I ascertain any fact from the Georgia Medical Society?

Sincerely,
(Name Withheld)

This side of the case is presented and reported on. In the interests of the profession, some sort of qualified investigation should seek out the facts of this case and render judgment. But until such a time as existing legislation can be strengthened or revised—such cases will continue to reflect upon the whole profession.

Editor's Note:

The Medical Association of Georgia Committee on Legislation is at the present time working on proposed legislation to create an "injunction" law to prohibit flagrant violations of the Medical Practice Act of Georgia.

First Annual

SECRETARIES CONFERENCE:

An Aid to "Organized Medicine"

We agree.

The First Annual Conference of County-District Medical Society Secretaries and Other Officers essentially is a misnomer. Actually, every active Association member would be interested in the proceedings and could utilize advantageously the basic information to be offered.

Scheduled to be held in Atlanta's Academy of Medicine on Sunday, February 22 and allowing Secretaries to attend the Atlanta Graduate Assembly the following three days, the Conference will kick-off at 10:00 a. m. with a concise panel discussion on "What Is the Medical Association of Georgia." This, we are assured, definitely will not be a slow, well-enunciated recital of that explanation to be found in our Constitution and By-Laws. Additional panel discussions to follow will be "The AMA and Your Society," "Your Stake in the 83rd Congress," "Functions of the District and County Society," and related topics.

Top guest speakers will be Dr. Cyrus Maxwell, Assistant Director of the AMA Washington Office, and Mr. Tom Hendricks, Director of the AMA Council on Medical Service. It might be well to note that both have established pleasing reputations for breezy methods of talk-making.

The Conference will be tailored to meet the needs of the newly-elected, inexperienced county society secretary, faced with the overwhelming aspects of liaison maintenance between his local society, the MAG headquarters office and AMA. Nor could it be more appropriately timed.

May such conferences be kept among this Association's traditional trappings which will go far toward keeping "Organized Medicine" organized in Georgia.

REMEMBER THE DAY

THE 10-13 OF MAY

Medical Association of Georgia

103rd Annual Session at Savannah

Scientific Articles

The PSYCHOSOMATIC *Concept in* GENERAL MEDICINE

EDWARD WEISS, M.D., Philadelphia

Psychosomatic is a relatively new term but it describes an approach to medicine as old as the art of healing itself. It is not a specialty but rather a point of view which applies to all aspects of medicine and surgery. It does not mean to study the soma less; it only means to study the psyche more. It is reaffirmation of the ancient principle that the mind and the body are one, that they function as interactive and interdependent organs—a principle which has always guided the intelligent general practitioner. As a science, psychosomatic medicine aims at discovering the precise nature of the relationship of the emotions and bodily function. Research in the subject is founded on the confluence of modern physiological investigation, as developed by laboratory science and animal experimentation and by the discoveries of psychoanalysis, both representing dynamic outgrowths of medicine.

Physicians have always known that the emotional life had something to do with illness, but the structural concepts introduced by Virchow led to the separation of illness from the psyche of man and a consideration of disease as only a disorder of organs and cells. With this separation of diseases into many different ailments came the development of specialists to attend to all of these distinct diseases. With the specialists came the introduction of instruments of precision and the mechanization of medicine began. Medicine now contented itself with the study of the organism as a physiological mechanism, impressed by blood chemistry, electrocardiography, and other methods of investigation. But medicine was unimpressed by and, indeed, often held in contempt the psychological background of the patient which was not considered so scientific as the results of laboratory studies. This period may, in truth, be referred to as the "machine age in medicine." It is not to be denied that remarkable developments have occurred during this period of laboratory ascendancy, but it also must be admitted that the emotional side of illness has been almost entirely neglected.

Meaning of the Term "Psychosomatic"

World War II did a great deal to change this emphasis, and the interest in psychiatry stems largely from the impetus that was given to the development of the subject by military medicine. Almost every physician who served in World War II came back with a healthy respect for the emotions as factors that can make people sick, and placed them on an equal plane with germs and bullets. Young physicians returned from military service determined to learn more about the emotions and ill health. They subscribed to the notion that the term "psychosomatic" must be as unhyphenated as we can make it; that it must mean the relation of psyche to soma as well as the reverse; and that it has to do with the scientific application of physiological and psychological techniques to the study of the sick human being in an effort to make a definitive diagnosis and in preparation for comprehensive medical care. I think that is as far as the term "psychosomatic" ought to go.

There remains some question as to whether the term should be used to designate an ailment, although that is the interpretation placed upon it by many of its proponents who refer to certain diseases of the vegetative nervous system, such as migraine, asthma, et cetera, as psychosomatic disorders. If the term is used in this way, it means that the disorder is one that can be understood only when emotional factors are studied as well as physical factors. Beyond that, I think the term refers to a technique; an

Read before The General Session of the One Hundred Second Annual Session of the Medical Association of Georgia, May 13, 1952.

From the Department of Medicine, Temple University Medical School, Philadelphia, Pa.

approach that applies equally to all aspects of medicine and surgery; a methodology—that is all. I am willing to concede that it is an interim term, good for the present time—to be abolished when all medicine becomes psychosomatic medicine. That day, I think, is fast approaching.

Psychosomatic Diagnosis

In the words of Halliday[4], when we study a sick person we must do so from three points of view. We must ask ourselves, first: What *kind* of person is this? What are his physical and psychological characteristics, inherent and acquired? Second: What has he *met;* what noxious influence in his environment, whether it be germ, allergen, or emotionally disturbing event? Third: What has *happened* as a result of the meeting of this predisposed individual with this disturbing event in his environment? If we regard a sick person from that point of view, then we do away with the age-old tradition in medicine that illness must be *either* organic *or* functional. The day has passed for us to look upon a sick person as either organically diseased or functionally disturbed. Instead, we must ask ourselves: What are the physiological disturbances? What are the psychological disturbances? And, are they related? That is the science of psychosomatic medicine which makes an effort to work out the precise relationship between the emotions and bodily disturbances.

Let us draw an analogy between this approach and the organic tradition in medicine. In studying an individual with what we consider to be an allergic manifestation, we first of all try to establish a background and family history of allergic disturbances. Then having learned that heredity may play a part, we see if there is a seasonal influence—in the distribution of pollen, for example. Then we try to see whether there is a skin reaction, and, perhaps evidence of antibody formation. Sometimes we expose such an individual to pollen or to the allergen in an effort to induce an attack. And finally, by means of hyposensitization or avoidance of the provocative agent we try to bring about improvement.

In order to establish postulates in our diagnostic survey, exactly the same thing is true of psychological medicine. Heretofore, in medical school we have been taught to place the psyche last. The patient is studied by means of the bare facts of medical history, a thorough physical examination, and the various laboratory studies, and if all are negative, then and only then, dare one make the diagnosis of functional or psychogenic disorder. There are grievous errors involved in this kind of thinking. First of all, there is the organically-minded physician who never admits the possibility that he has excluded all of the various diseases that may make his patient sick. In dealing with chronic illness in particular, he can always think of another possibility in the realm of obscure infection, allergic disorder, endocrine disease, or metabolic disorder that remains to be investigated. So the patient accumulates a thick sheaf of documents, containing the results of hundreds of dollars worth of laboratory procedures. He becomes fixed in his neurotic obsession with the disorder; and is often put through many medical and surgical procedures in an effort to achieve a cure. That is one of the dangers of the either/or approach based upon diagnosis by exclusion.

Not only should we establish *negative* data, derived by exclusion or evaluation of organic disease, but in addition we must make an effort to build up certain postulates from *positive* personality data in an effort to establish a diagnosis of neurotic or psychosomatic illness. In other words, neuroses and psychosomatic illnesses have their own distinctive features to be discovered by personality study. What are they? To go back to the analogy of the allergic disorder, we must first establish a family-history background of psychopathology—evidence of neurotic, psychosomatic, or psychotic disturbances among blood relatives or siblings that disclose a hint in this individual of certain characteristics inherited and acquired that makes him vulnerable to emotionally disturbing events.

Secondly, we must try to establish a diagnosis of disturbed behavior in childhood, because only rarely does neurotic or psychosomatic illness make its appearance for the first time in adult life. Usually disturbed behavior in childhood has marked the background for neurotic ailment. It is the sort of thing about which the family doctor used to say, "Oh, he'll grow out of it." It is true that he grows out of it for a period of time, but the seeds of disorder remain within the personality, later to come out when some situation in adult life reawakens old associations.

Thirdly, we try to establish a temporal relationship between the onset of the illness and some emotionally disturbing event that is specific for the individual. That means that we have to do more than simply inquire of a patient "Are you worried about anything?", or "Has anything happened?", and be satisfied with a negative reply. We must learn to know the patient's pattern of reaction to certain life situations and his ability to adjust to them, which depends upon the degree of anxiety in his make-up and the nature and seriousness of his conflicts.

Fourthly, in an effort to build up our diagnosis, we want evidence pointing to other neurotic symptoms or other evidence of a character disorder. We make a longitudinal instead of a cross-sectional study of the life history in an effort to show the genetic development and the specificity of certain events in this particular personality. Again, this does not differ from organic medicine where the allergen is specific in causing the disorder; nevertheless, it depends upon the dose and a certain susceptibility of the individual. In the same way, the emotionally disturbing event must be specific and must be present in sufficient degree to disturb the individual.

Fifthly, in taking our psychosomatic history, we can often reproduce in our patient, like an allergic attack, evidence of disturbed behavior if we touch upon significant material in talking to our patient or rather by encouraging our patient to talk. Evidence

of disturbed behavior—the racing pulse, the mounting flush, weeping or other evidence that we have touched upon meaningful material—is very significant—from the standpoint of diagnosis.

Lastly, and again comparing it to the allergic problem, hyposensitization by means of catharsis—talking about the problem again and again; or avoidance of provocative situations by means of environmental manipulation—changing the environment if we can't change the person—ought to lead to a significant degree of improvement and thus establish our six postulates in psychosomatic diagnosis.

If we add these to the physical and physiological studies, we should have a definitive diagnosis. In other words, just as we teach in physical medicine that we must make an etiological, anatomical, and a physiological diagnosis, so in the psychosomatic concept we teach that we must have a clinical, a dynamic, and a genetic diagnosis. The dynamic diagnosis refers to the emotionally disturbing event in the cross-sectional history that has precipitated the illness, and the genetic diagnosis refers to the longitudinal section of the life history which establishes the background for this emotionally disturbing event to produce an illness. Having established a diagnosis, the question of treatment arises, and it is a controversial one.

Psychotherapy

How far should the general doctor go in dealing with these problems? How much of it lies within his province? Does any of it? Or should he ignore the psyche in dealing with his patients, referring them to psychiatrists as soon as he suspects that the emotions are playing a part? This is intimately bound up with the question of "What is psychotherapy?" Is psychotherapy the art of medicine as practiced by the old family doctor; reassurance in large doses; a kindly, sympathetic manner; perhaps slapping the patient on the back and telling him he is all right; or sending him away on a vacation; or serving food in pretty dishes? Is this psychotherapy? No, psychotherapy is something more. Psychotherapy is a medical discipline, perhaps not as precise as the biological sciences, but nevertheless a system which can be taught, that has rules of order and that can be learned if we start soon enough in our medical curriculum.

Minor Psychotherapy

There is a minor psychotherapy as well as a major psychotherapy, just as there is a minor surgery and a major surgery. I think you will agree that most physicians are prepared to do minor surgery and feel themselves able to do it, but would not attempt major surgery for which they are unprepared. However, they recognize the indications for major surgery and send the patient to a specialist for further help. I think our responsibility in regard to psychotherapy in general medicine is the same. The great majority of patients whom we see, particularly with chronic illness, have an emotional component to their illness that has entered into the problem of ill health, either wholly or in part.

From my practice, including hospital and clinic experience, I divide patients with chronic illness into three groups[8]. One-third have an illness that is not to be accounted for on the basis of physical disease, but in which emotional factors are chiefly responsible. Another third of patients have organic findings, but these findings do not explain the entire illness; in other words, symptoms are out of proportion to disease. In a final third, the physical factors seem wholly responsible for the clinical picture that the patient presents. If these figures are true, and studies from many sources confirm them, then it stands to reason that we have an important job in medicine, so far as the psyche is concerned, that cannot be ignored, and the truth of the matter is that nobody ignores it. Everyone who deals with human beings who are sick has to deal with the psyche, no matter how clumsily or how unconsciously he does it. The point is that we must do it with understanding, that it can be taught, and that we must practice a minor psychotherapy in general medicine rather than continue to neglect this factor.

What can be said about minor psychotherapy? The following questions are usually raised. "How far shall I attempt to go?"

First of all, I think we cannot afford *not* to do it. In a study of "thick-chart patients" when the expense of the various laboratory procedures, and the time consumed by the dozens of visits in which perhaps only a single entry was made or a prescription written is compared with an hour or two spent in trying to understand the patient as a human being, I submit that the psychosomatic approach is less costly to the patient and physician in time and effort and harmful procedures. That does not mean, of course, that the man who practices general medicine has to sit down and spend an hour with every patient that he sees. Obviously that is not so, because the great majority of patients suffer from minor ailments or acute ailments, easily understood without a prolonged discussion of emotional factors. But for chronic illnesses, the kind that accumulate thick charts, and are subjected to all kinds of unnecessary medical and surgical treatment; for that kind of patient the physician has to take time, and it is economical in dollars and cents as well as in the salvage of human resources when he does so.

The Problems of Minor Psychotherapy

What are some of the problems that we deal with in minor psychotherapy? Think of the number of patients who present themselves daily and one finds that the central core of the psychosomatic disturbance is anxiety—anxiety which grows out of emotional conflict. That is why it doesn't do much good to say to a patient "Are you worried about anything?", because the things that disturb him are often not in his consciousness. They are expressing themselves as bodily disturbances for the very reason that they are repressed, pushed out of consciousness, and, therefore, create tension or pressure from within. I use homey analogies in talking to patients. I say to them "You are like a tea kettle full of steam. If it

does not come out of the spout, it tries to blow the lid off"; or perhaps a more elaborate explanation, "You are like an engine with the steam up—your wheels fail to go around in productive work; your whistle wants to blow (in talking about your problems) but cannot and so the steam tries to part your seams". Think of this in relation to hypertension. I say to such patients "If you have tension of emotional origin which you can't get rid of by word or deed, that tension is going to find some way of expressing itself. It's like steam under pressure."

Organ Language

Often such tension will be expressed in symbolic language, a kind of body or "organ language." The individual who cannot eat, who cannot tolerate food, who is nauseated or vomits, often cannot tolerate something in his environment. He cannot *swallow* this or that environmental situation. He cannot *stomach* this or that thing that has happened to him. Atypical neuralgia of the arm or face often represents the response to focal conflict rather than to focal infection. So often the pain represents the response to two opposing forces within the individual —he'd like to strike someone and is prevented from doing so by the affection and respect that is mingled with his hostility, and he gets a pain—atypical neuralgia. And so throughout the body one can find a homey explanation which either explains the complaints in whole or in part—the physical expressions of tension—and provide a ready avenue for the patient to talk about some of the problems which are disturbing him. How often we see patients with shortness of breath or sighing respirations which represent a load on the chest that they would like to get rid of by talking about some of their problems. Weakness in the legs, shakiness, and tremors represent the physical evidences of *insecurity* which we can usually ascertain by talking to the patient about his feelings of inadequacy. This is an approach I find very useful in minor psychotherapy.

Anxiety

Anxiety is the nucleus of the disorder, and it often finds a physical expression. The patient rationalizes that expression in some phobia which unfortunately is often added to by his medical advisor. Nearly every woman suffers from the fear of cancer. Many men do, too. They don't tell you that, but you're safe in the assumption that it is in the back of the mind. When you examine a patient who presents a vague complaint, an ache or discomfort, fatigue, or a lump, or swelling which she *thinks* she sees, and you're sure she is quite free of any organic disease, it is well to reassure her as to the absence of cancer. Often the most significant material is expressed in the last few minutes as the patient is leaving your office, when in the least formal part of the interview she says "I am so glad to know that you find me all right, doctor. I was so afraid I was developing cancer." The cancer fear is added to by our cancer propaganda. I think it is a price we have to pay, but it must be recognized for what it is. And then there is the fear of *heart disease* in which we so often see the iatrogenic influence? A patient develops an anxiety attack in a crowded room, suddenly feels faint, breaks into a sweat, the heart races, the pulse pounds, and a doctor is called. He feels the pulse, listens to the heart gravely or overlong, takes the blood pressure, then says to the patient "I don't *think* there is anything the matter with your heart, but you better take it easy", or "Your heart *seems* to be all right, but you better take these drops for a while." Here we have the beginning of a cardiac neurosis because the heart, from days of antiquity has been known as the seat of the emotions, just as the belly is the sounding board of the emotions. People fear heart disease and we have to be on the alert not to add to their apprehensions. How often we see patients with organic heart disease in whom the disability is caused not by the heart but by their concern and the preoccupation with the heart. Cardiac neurosis is a very common disorder and generally recognized as emotional in origin, and approachable only by psychotherapy. But many symptoms in organic heart disease are brought about by psychic stress; not only that but the disability might be indefinitely postponed if we could deal adequately with that psychic stress. I am sure that many cardiac patients come to grief long before their time because they have not been dealt with satisfactorily from an emotional standpoint. The emotions add a real burden to the work of the heart, not only in stress and strain but in disturbed function.

Third on the list of major anxieties is the fear patients have that they are *losing their minds.* They don't tell you that. They complain that their memory is slipping, that they cannot concentrate, that they are so preoccupied they cannot read,—they must read over and over to understand. What they don't say is, "I'm afraid I am losing my mind." With it often goes the thought of suicide which is most damaging of all. Bring that anxiety out on the surface. They may be greatly helped by sharing

Better Health Council

The Better Health Council of Georgia has moved into the Academy of Medicine, 875 West Peachtree, NE, Atlanta. Fulton County Medical Society has made this office available for the Better Health Council.

In many ways the Better Health Council's program is that of rural health. Through regional conferences and assistance given in the organization of local health councils, an effective channel for every phase of health education is available and utilized. The Better Health Council forms a liaison between health education and the "grass roots." The Council's aim is to carry the health message to the furthermost outposts in Georgia.

their burdens of anxiety. Tell them their problem is emotional, not mental. It will achieve marked relief.

The Problem for the Future

I think you can deal with these things in minor psychotherapy and often do a great deal of good. If the neurotic predisposition is not too great, you can help your patient immensely by dealing with these physical manifestations of anxiety. But what can we do about the problem so far as the future is concerned? I think that medical education has to do a very different job than it has done in the past. More and more stress is being put on psychiatry, but we have got to have a real integration of psychiatry into the medical curriculum rather than just more and more hours of psychiatry. Even premedical education must be changed. College psychology has to be different; it must be a psychology which really teaches human behavior. Our medical students have to come well-grounded in the social sciences, as well as the biological sciences. We have to introduce psychiatry from the very beginning. We must learn to study a person not only as a corpse on the dissecting table, but as a human being constantly reacting to environmental stresses. We must teach our students that such reactions disturb the working of the body as well as the soul. Our medical faculties must pay respect to and be oriented in these concepts, and I submit that if we don't do it in the medical school, we will never do it successfully. That means that we must have psychiatric facilities in our teaching hospitals where real integration with other branches of medicine can be achieved. Then we must prepare our medical internes and residents with rotation through a good department of psychiatry. It is too late at the post-graduate level. I don't think it is impossible, but it is late. However, short courses in a few institutions have done something to repair this deficiency in medical education. When these measures have been adopted perhaps we will no longer need the term psychosomatic because all medicine will be psychosomatic.

References

1. Alexander, Franz and French, Thomas M., Studies in Psychosomatic Medicine, Ronald Press Company, N. Y., 1948.
2. Dunbar, Flanders, Emotions and Bodily Changes, 2nd ed. Columbia University Press, N. Y., 1938.
3. Dunbar, Flanders, Psychosomatic Diagnosis, Paul B. Hoeber, N. Y., 1943.
4. Halliday, James L., Psychosocial Medicine: A Study of the Sick Society, W. W. Norton and Co., N. Y., 1948.
5. Levine, Maurice, Psychotherapy in Medical Practice, The MacMillan Co. N. Y., 1942.
6. The Journal of Psychosomatic Medicine, established 1939, under the editorial supervision of the American Psychosomatic Society, Paul B. Hoeber, N. Y.
7. Seguin, Albert C., Introduction to Psychosomatic Medicine, Emp. Grafica T. Scheuch, S. A., Lima, Peru, 1947. English translation, Internat. Univ. Press, N. Y., 1950.
8. Weiss, Edward and English. O. Spurgeon, Psychosomatic Medicine, 2nd Ed., W. B. Saunders and Co., Phila., 1949
9. Wittkower, Eric, A. Psychiatrist Looks at Tuberculosis, National Assoc. for Prevention of Tuberculosis, London, 1949.

Military Discharges and Induction

The following is a list of medical officers who have been released from service recently or will be released at an early date. Please use this list, or put it into the hands of those who will, in trying to obtain physicians to practice in your community.

Dr. Eleanor E. J. Bundy, 183 Lamont Dr., Decatur, Ga.
Dr. William R. Daniel, 230 Howard St., N. E., Atlanta, Ga.
Dr. James S. Maughon, 158 W. Lyle Ave., College Park, Ga.
Dr. William F. Moore, Jr., 2223 Kings Way, Augusta, Ga. (Mail returned)
Dr. Ralph P. Parnell, Jr., 1442 Markan Dr., N. E., Atlanta, Ga.
Dr. Charles J. Rey, Jr., 317 Fourth Ave., Decatur, Ga.
Dr. Alfred W. Scott, Jr., 238 W. Springdale St., Athens, Ga.
Dr. Mildred V. Tuggle, 3769 Hamilton Rd., Decatur, Ga.
Dr. Linton H. Bishop, Jr., Unadilla, Ga.
Dr. James L. Clements, Jr., P. O. Box 88, Eatonton, Ga.
Dr. Enon C. Hopkins, 824 Myrick St., Waynesboro, Ga.
Dr. David A. Wells, 519 S. Central Ave., Hapeville, Ga.
Dr. Thomas N. Lumsden, Nacoochee, Ga.
Dr. Ernest William Beasley, Jr., 22 Memorial Dr., S. E., Apt. 5, Atlanta, Ga.
Dr. Walter Soler Dunbar, 46 South Prado, N. E., Atlanta, Ga.
Dr. Thomas Jack Howard, Milledgeville Rd., No. 2, Augusta, Ga.
Dr. William Lies, III, Lumpkin St., Cuthbert, Ga.
Dr. Julian L. Lokey, 18A Country Club Apts., Augusta, Ga.
Dr. Julius Thornton Rucker, Jr., Washington Rd., Augusta, Ga.
Dr. William Lowe Clarke, Jr., 1041 St. Charles Ave., N. E., Atlanta, Ga.
Dr. Frederick B. Thigpen, 517 East 41st St., Savannah, Ga.
Dr. Lovick E. Dickey, Sylvania, Ga. (Residency—General Surgeon) (Capt. 2795th Med. Gp., Robins AFB, Ga.—Release Oct. 1, 1952)
Dr. Beverly W. Forester, 882 High St., Macon, Ga. (Private Practice—Internist. Capt. 2795th Med Gp, Robins AFB. Ga. Release 10-1-52).
Dr. Claude L. Pennington, Jr., 1161 Nottingham Dr., Macon Ga. (Capt. 2795th Med. Gp., Robins AFB, Ga. Release Oct. 2, 1952). (Plans to enter Residency training—Otolaryngologist).
Dr. Bruce C. Newsom, 1640 17th Ave., Columbus, Ga. Release Oct. 8, 1952) (Capt., 3650th Med. Gp., Sampson AFB, N. Y. Private practice—Gen. Sur.).
Dr. Lawrence S. Bodziner, 10 Washington Ave., Savannah, Ga. Release Oct. 15, 1952 (Capt., 3380th Med. Gp., Keesler AFB, Miss. Private practice—Ob and Gyn).
Dr. Alfred L. Watson, Grady Hospital, Atlanta, Ga. General practice and Internal Medicine.
Dr. Charles E. Owen, P. O. Box 33, Cedartown, Ga.

The following physicians of priority II will be issued orders to report for induction on December 30, 1952, in accordance with Special Call No. 9, Selective Service:

Dr. Albert J. Fisher, c/o Grady Hospital, Atlanta, Ga.
Dr. John K. Davidson, III, 300 Martin Bldg., Columbus, Ga.
Dr. Clarence K. Likins, 909 South Shelby, Louisville, Ky.
Dr. Christopher A. N. Rankine, 303 Georgian Terrace, Chamblee, Ga.

EUGENE L. GRIFFIN, M.D. and WILLIAM V. GOLKOWSKI, M.D., Atlanta

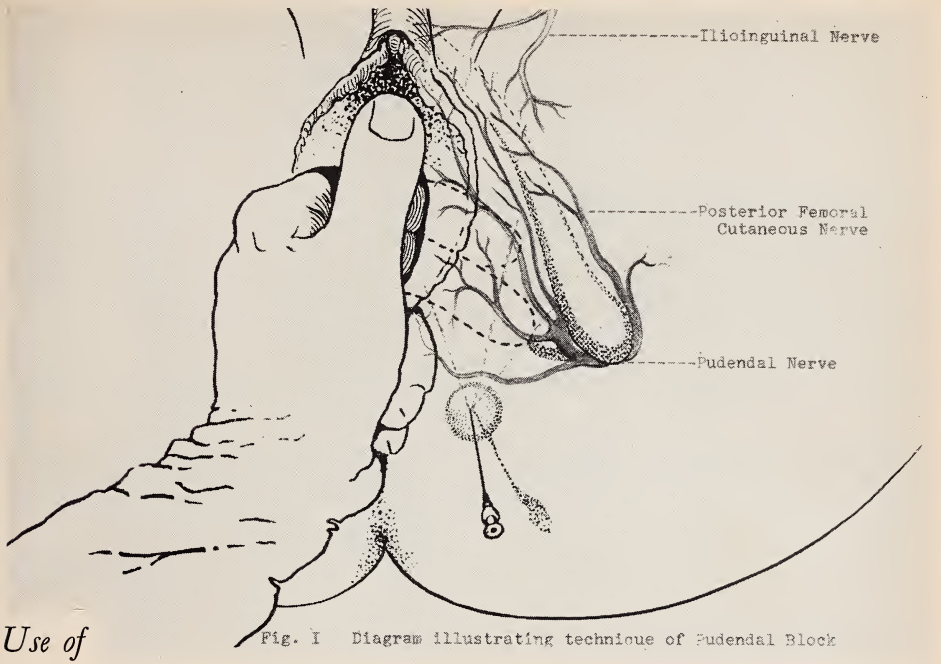


Fig. 1 Diagram illustrating technique of Pudendal Block

Use of

HYALURONIDASE*

as an Adjunct to Novocain in

PUDENDAL BLOCK *Anesthesia*

In 1941[1] one of us (E. L. G.) reported a series of 200 major gynecological operations performed at the New York Lying-In Hospital under pudendal block anesthesia. A similar series of 177 consecutive operations performed at the same institution under general anesthesia was used as a control. A comparison of the data from these patients showed that the morbidity rate was reduced from 36.1 per cent to 24.5 per cent when using pudendal block anesthesia. The incidence of postoperative shock was likewise reduced from 12.6 per cent to 7.5 per cent. It was pointed out at that time that the relative safety of pudendal block became all the more remarkable when the relatively poor condition of the patients operated upon under this type of anesthesia was taken into account. It was concluded

Read before the Section on Obstetrics and Gynecology at the One Hundred Second Annual Session of The Medical Association of Georgia, May 14, 1952.

From the Department of Obstetrics and Gynecology, Crawford W. Long Hospital, Atlanta.

*The hyaluronidase used in this experiment was generously supplied by Wyeth, Inc., as Wydase.

that while local anesthesia was not satisfactory for all types of gynecological surgery, pudendal block anesthesia could be used satisfactorily for almost any type of vaginal surgery.

Novocain has likewise been found to be the safest of all obstetrical anesthetics.[2] A study of the obstetrical records at the Crawford W. Long Hospital from 1949-1951 (Table I) inclusive shows that the use of local anesthetics for delivery has steadily increased, whereas general anesthetics have suffered an even more rapid decline in usage.

TABLE I

ANESTHETICS USED DURING DELIVERY AT CRAWFORD W. LONG HOSPITAL 1949-1951

Year	*Deliveries*	*Procaine*	*Gas and Ether*	*Procaine and Ether*
1949	5072	20.9%	33%	4.43%
1950	5047	38.55%	22.66%	4.41%
1951	5354	39.50%	15.05%	2.80%

There have been, however, certain objections to pudendal block anesthesia for deliveries. These have been well described by Baum[3] as:

1. Distention of tissues by the injected fluid.
2. Special skill required for the administration of the block.
3. Complete anesthesia and relaxation of tissue is not always adequately produced.
4. A prolonged period is required before the anesthetic is completely effective.

In order to circumvent these objections, Baum recommended the addition of hyaluronidase and epinephrine to a solution of 1 per cent procaine. The basis for this recommendation was founded on the following properties of these two substances. The hyaluronidase by its enzymatic action hydrolyzes hyaluronic acid, a substance which obstructs diffusion of invading substances, thereby increasing the penetration of the procaine into the tissues. Kirby, Eckenhoff and Looby[4] found that the addition of epinephrine to the hyaluronidase solution seemed to enhance the action of its spreading effect. After treating a total of 50 patients with pudendal block using 1 per cent procaine with epinephrine and hyaluronidase Baum concluded that practically all of the objections previously described to pudendal block had been overcome. Since that time Heins[5] and Douglas and Vosburgh[6] have likewise reported excellent results with the addition of the hyaluronidase and epinephrine to a 1 per cent procaine solution. We therefore felt urged to try this solution on our own service.

MATERIAL AND METHOD

The trial group was composed of 100 patients who received pudendal block anesthesia in which hyaluronidase was used. The control group consisted of 40 patients on whom pudendal block was performed without hyaluronidase. Only a few obstetricians participated in the experiment in order that the personal error might be reduced to a minimum. More than half of the pudendal blocks with hyaluronidase and all of the controls were done by the senior author. An additional 12 patients were given pudendal blocks in such a manner that one side of each perineum was blocked with a solution containing hyaluronidase, whereas the other side was blocked with a similar solution in which hyaluronidase was omitted.

The technique used was that shown in Figure I. The ischial spines were palpated through the vagina and 10 cc. of solution was injected about each; 5 cc. was then injected about the ischial tuberosity and an additional 5 cc. injected on each side about the clitoris and labia. The solution consisted of 30-60 cc. of 1 per cent procaine, to which was added 5 min. of 1:1000 epinephrine solution and 1 amp (150 turbidity reducing units) of hyaluronidase, the mixture being prepared immediately prior to delivery. Relaxation and anesthesia was determined by careful palpation of the perineal muscles and by grasping these tissues with Allis forceps and/or towel clips.

These patients were given sedation during labor which consisted of intravenous demerol and scopolamine to which was added a small amount of I.V. nembutal and/or seconal. It was realized that the preliminary administration of these drugs made the evaluation of the pudendal block more difficult. Since, however, these are the drugs administered routinely during the conduct of labor, it was felt that they should be used in this experiment.

RESULTS

Results of the first group of patients is shown in Table II. Of the 100 patients receiving pudendal

TABLE II

ANESTHESIA FOR DELIVERY AND REPAIR

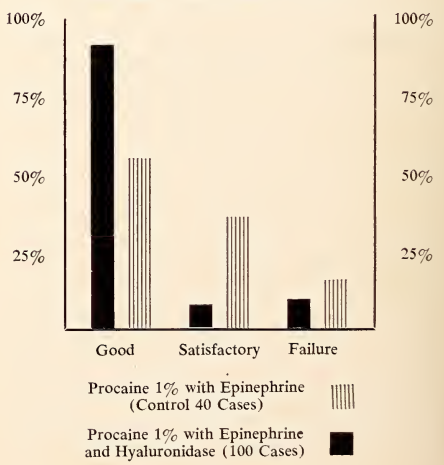


TABLE III

PUDENDAL BLOCK WITH AND WITHOUT HYALURONIDASE

	Hyaluronidase (100 cases)	*Control* (40 cases)
Parity		
Primipara	57%	57.5%
Multipara	43%	42.5%
Type of Delivery		
Spontaneous	48%	70%
Low Forceps	45%	27.5%
Mid Forceps	6%	0%
Breech	1%	2.5%
Duration of Anesthesia		
45 minutes and over	84%	62.5%
44 minutes and less	16%	37.5%

TABLE IV

12 CASES OF PUDENDAL BLOCK USING HYALURONIDASE ON ONE SIDE OF PERINEUM, NONE ON OTHER

	With Hyaluronidase		*Without Hyaluronidase*	
Anesthesia	Good	91.5%	Good	25%
	Satisfactory	8.5%	Satisfactory	66.5%
	Failure	0	Failure	8.5%
Relaxation	Good	83%	Good	33%
	Satisfactory	8.5%	Satisfactory	50%
	Failure	8.5%	Failure	17%
Onset of Anesthesia	More rapid	41.5%	Slower	41.5%
	Same	58.5%	Same	58.5%

blocks with hyaluronidase added, 89 per cent received a good anesthetic result. They were relatively quiet on the table, did not respond to pinching by Allis clamps and showed no evidence of any appreciable pain during the repair. An additional 5 per cent received a satisfactory anesthetic as indicated by some movement and evidence of pain during delivery and repair but not sufficient in amount to interfere with proper consummation of these procedures. There was a 6 per cent failure in this group so that a general anesthesia had to be administered. Of these six failures half were in patients who had a mid-forceps delivery with rotation.

Of the 40 control patients who received exactly the same care except that hyaluronidase was not used in the solution, 52.3 per cent had a good pudendal block anesthetic. An additional 35 per cent had a satisfactory anesthetic and there was a 12.5 per cent failure. This was more than twice the number of failures noted in the hyaluronidase group. No mid-forceps rotations were attempted in this group.

Further analysis of these patients (Table III) shows that the hyaluronidase series included 57.5 per cent primiparas and 42.5 per cent multiparas, so that both groups were almost exactly alike in this regard.

There were 48 per cent spontaneous deliveries in the hyaluronidase group as compared to 70 per cent in the control patients. A total of 45 per cent low forceps was done in the hyaluronidase group as compared to 27.5 per cent in the control. Most of these forceps were of the outlet variety. We felt that this figure showed better than any other how much more effective the hyaluronidase block is for relaxation and pain relief. It proved so effective that many of the patients lost their sense of perineal resistance and therefore the desire to push, thereby necessitating the use of outlet forceps. A total of 6 mid-forceps, 6 per cent of the group, was attempted in the hyaluronidase group, but as has been previously mentioned, half of these blocks were a failure. No mid-forceps were attempted in the control group. This tends to accentuate a characteristic of novocain anesthesia, namely that novocain does not completely relieve pressure pain. If there is a great deal of pressure from rotation and/or traction pudendal block even with hyaluronidase may not completely relieve the pain.

As regards the duration of anesthesia, it will be seen that the anesthetic in the hyaluronidase group appeared to last longer. There is nothing about the drug to prolong the anesthetic effect. The apparent prolongation of effect is probably due more to the fact that the involved nerves have been more completely blocked due to the spreading effect of the drug than to an actual prolongation of anesthesia.

The second group of 12 cases although admittedly small was studied so that both types of blocks could be compared concurrently in the same patient. In any experiment of this sort the personal factor must always be considered as in the final analysis the results of the experiment depend upon individual interpretation of the obstetrician which may be prejudiced. In many of these cases these blocks were done in such a manner that the assistant at the delivery had no way of knowing which side of the perineum was blocked with hyaluronidase. He was then asked to evaluate as to onset of anesthesia, adequacy of relaxation and degree of anesthesia. These results show (Table IV) that the hyaluronidase blocks were more effective, a total of 91.5 per cent good anesthetic blocks being obtained as compared to 25 per cent good anesthetics on the opposite side. Relaxation was also more effective, 83 per cent good results as compared to 33 per cent for the control group. Finally the onset was more rapid in the hyaluronidase group in 41.5 per cent of the cases.

SUMMARY

1. A series of 100 patients receiving pudendal block anesthesia with 1 per cent procaine, adrenalin and hyaluronidase and a control group of 40 patients

similarly treated except that hyaluronidase was omitted, was studied.

2. The incidence of good anesthetic block was increased from 52.5 per cent in the control group to 89 per cent in the experimental group; the incidence of failure was reduced from 12.5 per cent to 6 per cent.

3. The percentage of cases with pudendal blocks lasting longer than 45 minutes was increased by hyaluronidase from 62.5 per cent to 84 per cent.

4. The incidence of spontaneous delivery was 70 per cent in the control group and 48 per cent in the trial group. The low forceps incidence was 27.5 per cent in the control as compared to 45 per cent in the hyaluronidase patients. This was believed to be due to the better perineal anesthesia and relaxation of the latter.

5. Among six mid-forceps deliveries attempted under hyaluronidase blocks only three were completely satisfactory. No mid-forceps were attempted in the group not receiving hyaluronidase.

6. In a group of 12 patients receiving pudendal blocks with procaine, epinephrine and hyaluronidase on one side with the other side blocked in the same manner but without adding hyaluronidase to the mixture; the incidence of good anesthesia was 91.5 per cent on the hyaluronidase side as compared to 25 per cent on the opposite side. Relaxation was good on this side in 83 per cent of cases as compared to 33 per cent on the side without hyaluronidase and the onset of anesthesia was more rapid in 41.5 per cent of cases in which hyaluronidase was added.

Conclusion

Hyaluronidase when added to a 1 per cent procaine and epinephrine solution will greatly improve the anesthetic value of the block, will increase perineal relaxation, will apparently prolong the action of the block and will induce a quicker onset of anesthesia.

BIBLIOGRAPHY

1. Griffin, E. L., and Benson, R. C.: Am. J. Obst. & Gynec. 42:862, 1941.
2. Greenhill, J. P.: Am. J. Obst. & Gynec. 54:74, 1947.
3. Baum, F. E.: Am. J. Obst. & Gynec. 60:1356, 1950.
4. Kirby, C. K., Eckenhoff, J. E., and Looby, T. P.: Surgery 25:101, 1949.
5. Heins, H. C. Jr.: Am. J. Obst. & Gynec. 62:658, 1951.
6. Douglas, G. W., Vosburgh, L. F.: Am. J. Obst. & Gynec. 62:1253, 1951.

DISCUSSION

Dr. H. Boyd, Atlanta: I note that at Crawford W. Long Hospital, the use of the pudendal block is now 39.5 per cent. At St. Joseph's Infirmary with a much smaller staff, the incidence is between 75 per cent and 80 per cent. I well recall when there was no procaine in the delivery rooms of either hospital. I have been very enthusiastic about the use of pudendal block since 1942, using it in about 90 per cent of my patients. We were forced during the war, because of lack of personnel, to adopt some method other than the gas, oxygen, and ether for the relief of pain in the expulsive stage. The gas machine so far as I am concerned, can be relegated to the basemnt. One accustomed to pudendal block can do almost any maneuver from below. Shock and blood loss is minimal with its use. Vis-a-tergo is maintained. It is safer for the baby where sedation analgesia is used in the first and second stages and the baby's respiratory mechanism is more or less depressed. The economy of the procedure is obvious.

I have never found it necessary to use hyaluronidase. In fact, Baum's criticism that pudendal block distends the tissues won't hold. Neither does it require a great deal of skill. We teach it to our residents and in a very short time they are delivering the service patients with very little trouble. Of course, in an occasional case where the patient is very excitable, ether is necessarily used. We have had little trouble with it not lasting long enough since we have learned to use a greater volume of the solution, 60-80 cc. We use a prepared ampule of 5 cc. of 20 per cent solution and make this up to 100 cc. in normal saline. This solution may be had with or without epinephrin. The epinephrin prolongs the effect but I have noted occasionally quite a rise in the systolic pressure. For that reason, I discontinued using the epinephrin and simply use more procaine. As Dr. Griffin says, the urge to bear down is lessened and often stopped completely. This often necessitates the use of forceps but usually this is only an outlet affair and of no consequence. In fact, I see no need to wait for spontaneous expulsion of the baby. We go ahead, do the episiotomy and finish the case.

While I have not used the hyaluronidase, Dr. Griffin has convinced me of its value. I trust this paper will encourage others, who have not tried pudendal block, to use this very simple, safe, and practical method of handling the most important phase of the delivery.

Dr. Bothwell Traylor, Athens: Today we are hearing more about pudendal block and less about saddle block and caudal analgesia. I have heard of no deaths attributable to pudendal block but all of us are acquainted with the dangers of spinal and caudal analgesia.

Dr. H. G. Byrd of Athens uses pudendal block almost routinely and states he has used it at least 2500 times. I have seen him do several mid-forceps deliveries with rotation with good results. However, he does not use hyaluronidase.

I have used pudendal block in most of my forceps deliveries with good results. I am convinced that my analgesia would be improved by use of the technique described by the essayist.

The better results obtained by the addition of hyaluronidase to procaine should be a boon to obstetricians in small hospitals where trained anesthetists are not on call for routine forceps deliveries.

In his closing remarks, I should like to ask Dr. Griffin to say something about the types of vaginal operations he performs using pudendal block and to know if it was necessary to supplement the regional analgesia.

Why Worry?

There are two days every week which we should not worry—two days which should be kept free from fear and apprehension.

One of these days is yesterday, with its mistakes and cares, its aches and pains, its faults and blunders. Yesterday has passed forever beyond our control. All the money in the world cannot bring back yesterday. We cannot undo a single act we performed; we cannot erase a single word we said.

The other day we should not worry about is tomorrow, with its possible adversities, its burdens, its large promise and poor performance. Tomorrow also is beyond our immediate control.

Tomorrow's sun will rise either in splendor or behind a mask of clouds—but it will rise. Until it does, we have no stake in tomorrow, for it is yet unborn.

That leaves only one day—today. Any man can fight the battles of just one day. It is only when you and I add the burdens of those two awful eternities—yesterday and tomorrow—that we are liable to break down. —Illinois Medical Journal

RICHARD KING, M.D. and

JOHN S. WALKER, M.D., Atlanta

Congenital ATRESIA *of the* ESOPHAGUS *and* ESOPHAGOTRACHEAL FISTULA

The first successful case of re-establishment of continuity of the esophagus with primary anastomosis in atresia of the esophagus and esophagotracheal fistula was reported by Haight and Towsley in 1943.[3] This method of surgical treatment was advocated by Lanman[9] in 1936 and he was the first to perform a primary anastomosis of the esophagus; however, the patients he treated in this manner unfortunately expired. In 1939 Leven[10] and Ladd[6] each had a successful result by using the multiple stage procedure. Prior to this time the mortality rate in this congenital abnormality was 100 per cent. The main purpose of this communication is to report six cases, three of which were corrected successfully by primary anastomosis and three were done by the multiple stage procedure. The terminology of all cases in the literature is tracheoesophageal to designate the presence of a fistula between the esophagus and trachea. Since the esophagus is more involved in the pathology, it seems that it should be emphasized by using the term, esophagotracheal, to express the presence of fistula.

Embryology

In early fetal life the esophagus and trachea are one tube. Some time between the fourth and twelfth week this tube becomes divided into two by a lateral ingrowth of mesoderm. Subsequently the lumen of the esophagus becomes obliterated by the rapid proliferation and concrescence of its epithelial lining. Later this solid cord becomes vacuolated, the vacuoles coalesce, and the lumen is reestablished. An arrest in development or failure of the vacuoles to coalesce results in atresia of the esophagus.[7]

Read before the Section on Thoracic Diseases at the One Hundred Second Annual Session of the Medical Association of Georgia, Atlanta, May 14, 1952.

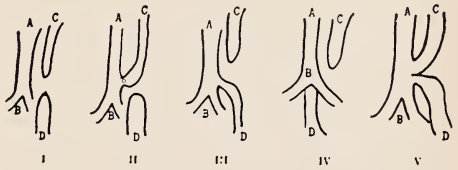


Fig. 1. Anatomical classification. Courtesy of Ladd: The Surgical Treatment of Esophageal Atresia and Tracheoesophageal Fistulas, *The New England Journal of Medicine*, Vol. 230, 1944.

Anatomic Classifications

According to Ladd[6] there are five types (Fig. 1). In type 1, the upper portion of the esophagus ends in a blind pouch and is completely separated from the lower pouch which extends down to the stomach. In type 2, the upper segment of the esophagus ends in a fistulous tract entering the trachea just above the bifurcation, whereas the lower segment is much the same as in type 1. In type 3, the upper segment ends blindily as in type 1 but the lower segment is connected with the trachea just above its bifurcation by a fistulous tract. Type 4 is similar to type 3 except that the fistulous tract of the lower segment enters the trachea at its carina instead of just above its bifurcation. In type 5, both the upper and lower segments communicate with the trachea. Types 3 and 4 are the most common. There is another type which has been reported by Holt, Haight and Hodge[5] in which the esophagus is in continuity but is connected to the trachea by a fistulous tract. This latter type may not manifest itself until later in life.

Clinical Findings

When a newborn infant has an excessive amount of mucus in the mouth with drooling, repeated attacks of respiratory difficulty, cyanosis, and immediate vomiting when feedings are attempted, atresia of the esophagus should be suspected. Examination of the chest will reveal rales in one or both lungs. The abdomen may or may not be distended, depending upon the type of abnormality present. Quite often there are associated anomalies present. In 113 cases reported by Swenson,[16] 80 malformations were found, mostly of minor consequence. In one of the cases in this report there was an associated duodenal atresia and malrotation of the colon. In another case the baby had an associated congenital heart lesion.

Roentgenologic Examination

The diagnosis of atresia of the esophagus can be established by inserting a No. 8 or No. 10 French catheter into the esophagus. If it meets an obstruction or curls upon itself about 8 to 10 cm. from the alveolar ridge as observed by fluoroscopic examination, atresia of the esophagus is present. The upper pouch can be well outlined by injecting 1 to 2 cc. of Lipiodol; all of which should be aspirated at the end of the examination. Barium should never be used since it might spill over into the tracheo-bronchial tree. Since the diagnosis can be made by the insertion of the catheter alone, it seems that it would be safer not to use Lipiodol, because it is known that this radiopaque material sometimes produces a pneumonitis.[12] If a large amount of oil were to spill over into the trachea, the respiratory capacity of the lungs, already overburdened by the presence of atelectasis or pneumonia, would be diminished. The respiratory reserve in infants is quite small. If an x-ray shows the presence of gas in the stomach and intestines, it establishes the presence of esophagotracheal fistula; however, if no air is present in the intestines it does not necessarily mean that a fistula is not present but may be the result of agenesis of the lower segment of esophagus or the presence of a very small fistula.

Preoperative Care

The infant should be given oxygen continuously. The mouth and upper segment of the esophagus can be kept fairly dry by frequent aspirations or a small catheter can be placed in the esophagus with mild continuous suction. Glucose solution should be given in and attempt to overcome dehydration but an excessive amount of saline should be avoided. Usually six to 24 hours are required to prepare the patient for surgery. Penicillin and streptomycin should be given both prior to and after surgery has been performed. Haight recommends that the patient be kept on the side to be operated upon in order to limit the atelectasis or pneumonia to one lung. Involvement of both lungs is a contraindication to thoracotomy.

Operative Approach and Technique

There are two types of approach which can be used when primary anastomosis of the esophagus or ligation and division of the lower segment are contemplated. In the retropleural approach short segments of several ribs are resected, intercostal bundles are divided and the parietal pleura is dissected forward exposing the mediastinal structures. Potts[13] advocates the use of a retropleural approach by resecting the fourth rib and then dissecting the pleura away from the chest wall exposing the structures of the mediastinum. In the six cases reported here a transpleural approach was used by entering the thorax through the fourth or fifth intercostal space and cutting the rib above or below anteriorly and posteriorly for more exposure. It is believed that this approach is a little faster and better exposure can be obtained. In the transpleural approach, the patient is placed on the table with the right side up and the incision is made by starting between the spines of the vertebrae and the medial border of the scapule and carried forward around the angle of the scapula. Local ½ per cent novocain is used until just before the thorax is opened and then ether is administered through a tight fitting infant mask connected to a Stephens valve which avoids any resistance and prevents rebreathing. The incision is spread with a Gelpi retractor and the lung is retracted forward. The mediastinal pleura is opened and the azygos vein is ligated and divided between ligatures. The lower segment of the esophagus is identified, dissected out and ligated close to the trachea with silk. It is then transfixed and divided distal to the ligature. The upper segment of esophagus is identified, dissected out, and an incision is made in the end. The distal segment is then telescoped into the upper segment and anastomosed with two layers of interrupted No. 0000 Deknatel sutures. Biggers[1] states that if there is any tension, it is better to do a simple end-to-end anastomosis with two rows of interrupted fine silk sutures.

In two of the cases discussed, No. 5 and No. 6, continuity was established by using an end-to-end anastomosis with an inner-layer of continuous No. 0000 catgut and the outer row of interrupted No. 00000 Deknatel sutures. It is believed the end-to-end procedure gives a better anastomosis than the telescoping method. The anastomosis is made over a small catheter which should be removed at the end of the procedure. During the operation the baby is given a blood transfusion according to weight and the lung is reexpanded every 15 to 20 minutes. The thoracic cavity is irrigated with normal saline and penicillin and streptomycin are left in the cavity. A catheter is inserted so that the end is near the site of anastomosis and the other end is connected to a negative pressure bottle. Catheter drainage not only aids in the reexpansion of the lung and the drainage of any fluid but helps to detect a leak in the anastomosis earlier before the thoracic cavity becomes filled with saliva and gastrostomy feedings. The fourth and fifth ribs are approximated by four interrupted catgut sutures and the remainder of the incision is closed with interrupted sutures of silk or continuous catgut sutures. If the abdomen is markedly distended a gastrostomy should be performed prior to thoracotomy; otherwise, gastrostomy can be performed immediately after thoracotomy or the following day.

In the cases in which primary anastomosis cannot be done a cervical esophagostomy and gastrostomy have to be performed. These procedures are usually done under local ½ per cent novocain with the aid of ether if necessary. A Stamm gastrostomy was used in all the cases reported here.

CASE REPORTS

Case 1. Baby G. M., female, weight 4 lbs. 11½ ozs. was born January 28, 1950 and admitted to the nursery at Crawford W. Long Hospital 13 hours later on the same day. The infant was full term. She had an excessive amount of mucous in the nose and throat and numerous rhonchi were heard throughout both lung fields. Atresia of the esophagus was suspected and under fluoroscopic examination, a small catheter was inserted into the esophagus and was seen to stop and curl up on itself at the level of T 1. The pouch was well outlined by injecting a small amount of Lipiodol. (Fig. 2). Air was present in the bowel loops which confirmed the

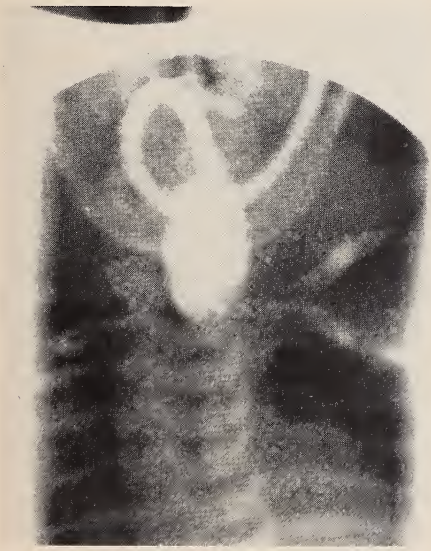


Fig. 2. Catheter and Lipiodol in upper pouch. Extends to T 1.

presence of an esophagotracheal fistula. She was prepared for surgery and when 33-hours-old the right chest was opened through a transthoracic incision. The lower segment was identified, ligated and divided. The upper segment could only be identified by pushing down on it with a catheter and since the two segments were found to be too widely separated primary anastomosis could not be performed. The chest was closed and a cervical esophagostomy and a Stamm gastrostomy were accomplished. At the time of discharge the baby weighed 8 lbs. 6 ozs. Shortly after discharge from the hospital the parents moved to another city. At one year of age the baby weighed 12 lbs. Due to the fact that the baby was quite a social problem because of the financial status of the parents, continuity of the gastro-intestinal tract was established when the baby was 21 months of age by using a left thoraco-abdominal approach. Her weight at this time was 13 lbs. 10 ozs. After closing the gastrostomy opening the stomach was well mobilized and pulled to the apex of the left chest cavity and posterior to the lung. The diaphragm and left thoracic cavity were closed and the tube in the left chest connected to a water trap. Then the inner half of the left clavicle and first rib were resected and a two layer anastomosis was done between the end of the

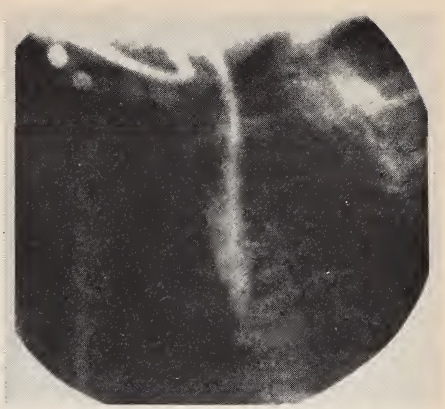


Fig. 3. Catheter and Lipiodol in upper segment of esophagus.

cervical esophagus and the fundus of the stomach. Then a tracheotomy was performed. The baby did well until the fourth postoperative day when she expired as a result of bronchopneumonia of the left lung. The blood culture was positive for enterococci. Autopsy showed that the anastomosis was intact and there was no evidence of leakage.

Case 2. Baby K. B., female, weight 3 lbs. 13 ozs. was born May 25, 1950 at Crawford W. Long Hospital after a 3½ hour labor. The baby cried spontaneously but there was some difficulty in establishing respiration. On initial examination in the nursery she had irregular respirations and breath sounds were diminished in both lung fields. On the following morning atresia of the esophagus was suspected but the possibility was not investigated until the following day, May 27. Fluoroscopic and spot film studies of the esophagus showed Lipiodol to stop just below the level of the bifurcation of the trachea (Fig. 3). Gas was present in the small and large bowel which confirmed the presence of esophagotracheal fistula. A Stamm gastrostomy was performed under local anesthesia on May 27th and the following day a right thoracotomy and primary anastomosis were



Fig. 4. X-ray 4th postoperative day, showing fluid level to right 3rd rib posteriorly.

done by telescoping the lower segment into the upper. On the second postoperative day, the Levin tube over which the anastomosis had been performed was accidentally pulled out and replaced but removed the following day. On the fourth postoperative day the baby's respiration became quite difficult and an x-ray revealed the presence of fluid in the right thorax. This was confirmed by thoracentesis. The material consisted of saliva and formula (Fig. 4).

A thoracotomy was performed immediately and two drainage tubes were placed down to the site of anastomosis. One was clamped for the purpose of irrigation later and the other connected to a negative pressure bottle. Three days after the thorax was drained gastrostomy feedings were started again but milk reappeared in drainage from the chest. Gastrostomy feedings were then stopped from June 7 to June 12 but reappeared in the drainage from the chest when started again. On June 14, 12 days after the original drainage the tubes were removed and the sinus tract was packed with iodoform gauze down to the site of anastomosis. Gastrostomy feedings, were again started the following day. The hands and feet of the baby became edematous but this complication was corrected by the administration of serum albumin and blood transfusions to correct the protein deficiency. The pack was left in place for 72 hours and then removed and the tubes were replaced. On July 1 regurgitation of the milk was noted in the mouth and July 3 under the fluoroscope, a ureteral catheter was passed through the esophagus to the stomach. Then a foreign body instrument was inserted through the gastrostomy tube and under fluoroscopic guidance the ureteral catheter was grasped and pulled out through the tube. A piece of silk was then tied to the upper end of the catheter and pulled through the esophagus and out through the gastrostomy tube. The baby was able to take small amounts of dextrose water by mouth with no difficulty. There was no drainage through the thoracotomy wound. The tubes were then removed from the chest. Several days later dilatation of the esophagus was begun by threading a bougie over the string. The intervals between dilatations have been lengthened to four months. The gastrostomy tube will probably be removed sometime in the near future. Weight at the time of discharge July 30 was 9 lbs. 2 ozs. The baby's weight at the present time is 18 lbs. (Fig. 5).



Fig. 5. Lipiodol esophagram at 18 months of age.

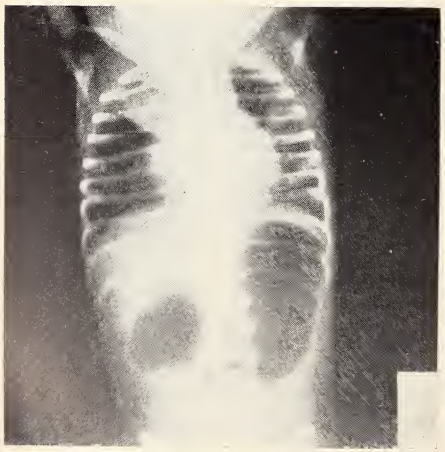


Fig. 6. PA view showing atelectasis of R. U. L. Stomach and duodenum distended with gas.

Case 3. Baby J. H., female, weight 3 lbs. 7¾ ozs. was born June 5, 1950 and admitted to Crawford W. Long Hospital June 6 when 34-hours-old. The baby had excessive amount of mucus in her mouth, frequent attacks of cyanosis, and water and formula were vomited immediately when given. Initial physical examination revealed that the baby was having respiratory difficulty and there was mild cyanosis of the extremities. Yellowish to dark brown blood-tinged mucus was drooling from the mouth and nose constantly. The cry was weak and activity poor. Respirations were rapid, shallow and labored, with marked inspiratory retraction and a prolonged expiratory grunt. Rales were heard throughout both lung fields. The abdomen was mildly distended. The diagnosis of atresia of the esophagus with esophagotracheal fistula was suspected and x-rays made. PA view of the chest revealed the presence of atelectasis of the right upper lobe but the left lung was essentially normal in appearance. The stomach and duodenal cap were shown to be distended with gas (Fig. 6). Under fluoroscopic examination a small catheter was shown to stop at the level of T 1 and the pouch was outlined with a small amount of Lipiodol (Fig. 7). After being prepared for surgery a right thoracot-

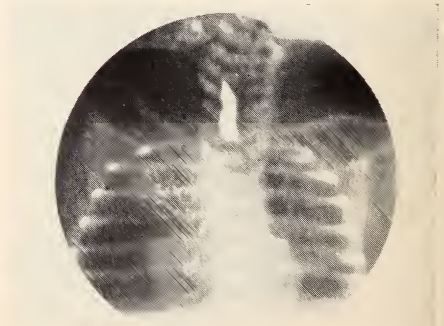


Fig. 7. Lipiodol in upper segment of esophagus which extends to T 1.

omy was performed when the baby was 42-hours-old. The upper and lower segments of esophagus were identified as type 3. A primary anastomosis was impossible due to the wide separation of the two segments of esophagus. The lower pouch was ligated and divided between ligatures. The baby was then turned on her back and a cervical esophagostomy and a Stamm gastrostomy were performed. After 12 hours gastrostomy feedings were begun but resulted in forceful expulsion of gastric contents through the gastrostomy tube. Another x-ray was made and there still was no evidence of gas below the duodenum. Two days after the original operation a laparotomy was done and duodenal stenosis and malrotation of the colon were found. The cecum was located in the left upper quadrant. A duodenojejunostomy was performed and the malrotation was corrected by freeing the ascending and transverse colon and replacing in as normal a position as possible. On the following day gastrostomy feedings were started again. Two days later the baby became increasingly cyanotic and an x-ray showed the presence of fluid in the right chest. Thoracentesis was done and yielded 45 cc. of straw colored fluid and gave immediate relief of dyspnea. On June 13 there was still no evidence of air beyond the duodenum and another laparotomy was performed. Compression of the duodenum produced distention of the jejunum which indicated an opening of the previous anastomosis. Due to the baby's poor condition it was felt that gastrojejunostomy was the safest procedure to perform and this was done. Gastrostomy feedings were started again on the following day. Air was noted to be present in the intestinal loops and the baby began having normal stools. She was discharged July 26 at which time her weight was 4 lbs. 10 ozs. Her present weight is 21 lbs.

Case 4. Baby C. R., female, weight 5 lbs. 8 ozs., full term, was admitted to Crawford W. Long Hospital on December 26, 1950 when 5-days-old. Three hours after birth the baby was found to be quite cyanotic and improved after being sucked out and oxygen administered. She had an excessive amount of mucous and immediately regurgitated all feedings. She also had frequent attacks of difficult respiration and cyanosis. She had varying degrees of abdominal distention which was quite marked at the time. Diagnosis of atresia of esophagus and esophagotracheal fistula was made and confirmed by fluoroscopy and x-rays after passing a catheter into the upper pouch and injecting Lipiodol (Fig. 8). The upper pouch extended to T 2 and there was evidence of a communication with the trachea (Fig. 9). Lipiodol also entered the lower segment of the esophagus showing the presence of a fistula between the trachea and this segment. PA view of the chest revealed the presence of mottled shadows of increased density occupying much of the upper lung field and about ½ to ⅓ of the left lower lung field (Fig. 10). Physical examination revealed a markedly cyanotic newborn female in acute respiratory distress. Subcostal and substernal retractions were present and rales could be heard throughout both lungs. There was present a very loud systolic murmur over the entire precordium. The abdomen was markedly distended. Since part of the respiratory distress was due to the marked distention of the abdomen a Stamm gastrostomy was performed under local ½ per cent novocain. The stomach was deflated and the condition of the patient improved. Two days later it was decided the baby could not withstand a thoracotomy at the time and cervical esophagostomy was performed to prevent secretions from running into the trachea. Bronchoscopy was necessary following the procedure. The baby could not be fed because the lower end of the esophagus had not yet been ligated. Five days later when the baby was 12-days old, her condition improved enough to consider thoracotomy. This was performed quickly with ligation and division of the lower segment of the esophagus, which was found to enter the trachea at the bifurcation. According to the classification she had a type 5 in which both the upper and lower segments entered the trachea. Six hours later small gastrostomy feedings were started. The baby continued to have attacks of cyanosis and several convulsions and expired the following day, 24 hours after thoracotomy and 14 days after birth. An autopsy was not obtained and therefore the type of congenital heart lesion could not be determined.

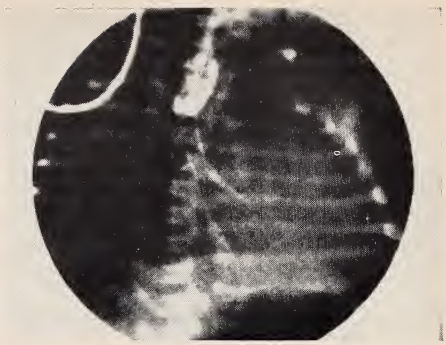


Fig. 8. Lipiodol in upper segment of esophagus and left main stem bronchus.

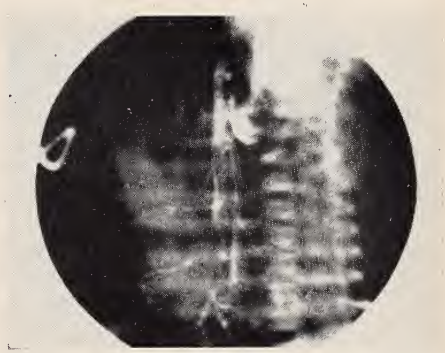


Fig. 9. Lipiodol showing fistula between upper pouch and tracea.

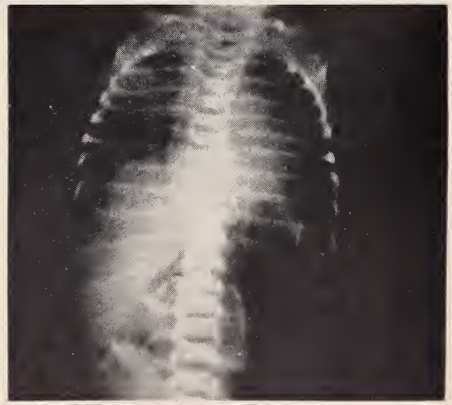


Fig. 10. Lipiodol can be seen in lower segment of esophagus. Stomach and intestines distended with gas.

Case 5. Baby R. F., male, weight 6 lbs. 13 ozs. full term, was admitted to Crawford W. Long Hospital July 4, 1951 when 4-days-old. The baby was delivered by forceps in the

home and there was no cyanosis at birth. He was given breast feedings but vomited each feeding. The parents took the child to a pediatrician because of periods of cyanosis and secretions in the mouth with drooling. The diagnosis was made by the pediatrician and confirmed at the hospital here by the injection of 2 cc. Lipiodol which outlined the upper esophageal pouch quite well (Fig. 11). A right thoracotomy was done using the same technique which has been outlined and after ligating and dividing the lower segment of esophagus close to the trachea, an end-to-end anastomosis was done between the upper and lower segments with an inner row of continuous catgut and an outer row of interrupted No. 00000 Deknatel sutures. On the fourth postoperative day the baby was started on glucose water by mouth and placed on a formula the following day. Due to the presence of a palpable mass in the right flank an I. V. pyelogram was done and it was thought that two kidneys could be outlined on the right with absence of the kidney on the left. Patient was discharged on the sixteenth postoperative day and the parents were advised to bring the baby back in a week to 10 days to determine if dilatation of the esophagus were necessary at that time. When the baby was readmitted to the hospital 10 days later, there was a stricture at the site of anastomosis and the baby was unable to take his formula. A Stamm gastrostomy was performed and a string was pulled through the mouth, the esophagus and out through the gastrostomy tube to act as a guide for dilatation. The esophagus was dilated with Tucker bougies and feedings resumed 24 hours later. The course for the next two months was quite stormy with frequent generalized convulsions and inability frequently to retain feedings. The baby was discharged approximately three months after the second admission weighing of 9 lbs. 6 ozs. Dilatation of the esophagus was carried out every six weeks. At the time of admission March 18, 1952 for dilatation the baby's weight was 15 lbs. 5 ozs. He had a grunting type of respiration and appeared to be quite listless. There was no evidence of icterus, cyanosis or retraction. The liver was about three fingers below the costal margin. Dilatation was not done because of the baby's condition. He expired the following day but autopsy did not reveal the cause of death.

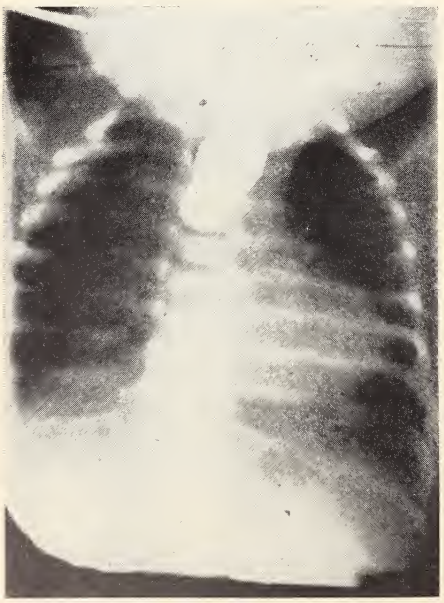


Fig. 11. Lipiodol in upper segment of esophagus.



Fig. 12. Lipiodol and catheter in upper segment of esophagus.

Case 6. Baby M. D., male, weight 7 lbs. 3 ozs., was born at Georgia Baptist Hospital April 15, 1952. He was found to have an imperforate anus and it was necessary to perform a colostomy on the second day. The baby presented the usual symptoms of vomiting its formula, excessive secretions, drooling of the mouth and attacks of difficult respiration. Atresia of the esophagus was suspected and this was proven on the third day by passing a small catheter in the upper pouch and injecting 2 cc. of Lipiodol (Fig. 12). After adequate preparation, a right thoracotomy was done on the fourth day. The azygos vein was ligated and divided and the mediastinal pleura opened. The baby was found to have a type 3 atresia and fistula. Several interrupted silk sutures were placed close to the trachea in the lower esophageal segment but before dividing this segment the upper pouch was mobilized well up into the neck, pulled down and several interrupted sutures made between the upper and lower segments. Then the lower segment was divided from the trachea and a two layer end-to-end anastomosis was performed. Several interrupted sutures were placed between the upper segment and the prevertebral fascia to take tension off the suture line. With a catheter in place and connected to a water trap the chest was closed in the usual manner. Then the baby was turned over and a Stamm gastrostomy was performed. Before the tube was inserted into the stomach, the catheter over which the anastomosis was performed was passed on into the stomach and a heavy piece of silk was attached and pulled through the esophagus and out through the nose for future dilatation. Approximately one month has elapsed since

thoracotomy and the patient has done very well and is on a formula by mouth.

Postoperative Care

Swenson[16] has reported an excellent outline of postoperative care of these patients. Pneumonia can be fairly well controlled by chemotherapy. Generalized edema should be avoided since it interferes with the healing of the chest wound and anastomosis of the esophagus. To forestall this complication caution must be taken against giving excessive amounts of fluid, particularly saline solutions. Until feeding can be taken by mouth or given through the gastrostomy tube adequate protein intake should be taken care of by the administration of plasma and blood. Swenson also states that each gastrostomy feeding should require from 35 to 45 minutes to be given in order to eliminate the hazard of vomiting and possible rupture of the suture line.

Reconstructive Phase

In the cases of atresia of the esophagus which cannot have primary anastomosis, thorocatomy, ligation and division of the lower segment of the esophagus, cervical esophagostomy and gastrostomy have to be performed. The multistage procedure requires reconstruction of an esophagus at a later date. This may be antethoracic or intrathoracic. An antethoracic esophagus can be formed from a skin tube which is developed in stages and used to connect the cervical stoma to the gastric stoma[6 8 18]. The stomach or a segment of the jejunum can be pulled up between the skin and chest wall and anastomosed to the esophageal stoma in the neck[11 18]. Potts[14] states that the stomach should not be used in this manner because of the marked cosmetic defect which results. Construction of an intrathoracic esophagus can be accomplished by using either stomach[14] or jejunum[4] and then anastomosing the fundus of the stomach or the end of the jejunal segment to the esophagus in the neck. Potts states that the ideal time for reestablishment of the continuity of the gastro-intestinal tract is approximately two and one-half years of age since the chest will be large enough at that time to accommodate the stomach. Sweet and a number of others have restored continuity by mobilizing the stomach and anastomosing the fundus to the cervical esophagus[2 17]. More recently Robertson and Sarjeant[15] have reported two successful cases in adults in which a segment of jejunum was pulled up through the anterior mediastinum and then anastomosed to the upper segment of esophagus. Leven and Varco[11] recently reported the restoration of oral alimentation in nine cases by using an antethoracic segment of jejunum and one case by moving the stomach through the left thorax and performing an esophagogastrostomy at the superior mediastinal aperture. The lower end of the jejunum was also anastomosed to the stomach in the nine cases. The only one which exhibited any nutritional disturbances was the case in which the stomach was used.

Summary

Six cases of atresia of the esophagus and esophagotracheal fistula have been presented. In three cases continuity of the esophageal segments was reestablished by primary anastomosis and three were done by the multistage procedure. There was one death 24 hours after thoracotomy, one died at 21 months of age, four days after cervical esophagogastrostomy was done. Another patient died at nine months of age but autopsy did not reveal any cause of death.

References

1. Bigger, I. A.: Treatment of Congenital Atresia of Esophagus with Tracheosophageal Fistula. Ann. of Surg.: 129, 572-587 (May) 1949.

2. Garlock, John H.: The Re-establishment of Esophagogastric Continuity Following Resection of Esophagus for Carcinoma of Middle Third. S, G and Obst. 72, 23-28 (Jan.) 1944.

3. Haight, Cameron and Towsley, Harry A.: Congenital Atresia of the Esophagus with Tracheoesophageal Fistula. Extrapleural Ligation of Fistula and End-to-end Anastomosis of Esophageal Segments. Surg., Gyn.. & Obstet., 76, 672 (June) 1943.

4. Harrison, A. W.: Transthoracic Small Bowel Substitution in High Stricture of the Esophagus. J. Thora. Surg., 18, 316-326, 1949.

5. Holt, J. F., Haight, C. and Hodges, F. J.: Congenital Atresia of the Esophagus and Tracheo-esophageal Fistula. Radiology 47, 457-470, 1946.

6. Ladd, Wm. E.: The Surgical Treatment of Esophageal Atresia and Tracheoesophageal Fistulas. The New Eng. J. of Med., 230, 625-637, 1944.

7. Ladd, Wm. E. and Swenson, O.: Esophageal Atresia and Tracheoesophageal Fistula. Ann. of Surg. 125:23-40, 1947.

8. Lam, Conrad R.: Completing the Multiple Stage Operation for Atresia of the Esophagus. J. Thoracic Surg., 18, 327-335, 1949.

9. Lanman, Thomas H.: Congenital Atresia of the Esophagus, 32 cases. Arch. Surg., 41, 1060-1083, 1940.

10. Leven, N. L.: Congenital Atresia of the Esophagus with Tracheoesophageal Fistula. Report of Successful Extrapleura Ligation of a Fistulous Communication and Cervical Esophagostomy. J. Thora. Surg. 10, 648, 1941.

11. Leven, N. L. and Varco, R. L.: The Relayed Restoration of Oral Alimentation in Children with an Esophageal Defect Remaining after Closure of a Tracheo-Esophageal Fistula. Presented to American Asso. for Thoracic Surg. May 1952: to be published later.

12. Overholt, Richard H. and Ramsey, Beatty H.: Editorial: Discretion in the Use of Bronchography. Diseases of the Chest: XV, 745 (June) 1949.

13. Potts, Willis J.: Congenital Atresia of the Esophagus with Tracheo-esophageal Fistula. J. Thoracic Curg., 20, 671-680, 1950.

14. Potts, Willis J.: Congenital Atresia of the Esophagus: Antethoracic Placement of the Stomach Followed by Intrathoracic Transplantation. J. Thor. Surg. 681, 1950.

5. Robertson, Ross and Sargeant, R. R.: Reconstruction of Esophagus. J. Thoracic Surg. 20, 689-701, 1950.

16. Swenson, O.: The Diagnosis and Treatment of Atresia of the Esophagus and Tracheoesophageal Fistula. Pediatrics, 1, 195-204 (Feb.) 1948.

17. Sweet, Richard H.: New Method of Restoring Continuity of Alimentary Canal in Cases of Congenital Atresia of Esophagus with Tracheoesophageal Fistula not Treated by Primary Anastomosis. Ann. of Surg. 127, 757-758, 1948.

18. Yudin, S. S.: The Surgical Construction of 80 Cases of Artificial Esophagus. Sur., Gyn., and Obs. 78, 561, 1944.

Discussion

Dr. William A. Hopkins (Emory University): I think that this paper was apropos to the present time as a considerable number of these lesions are often seen. It is our feeling that the most important contribution to this lesion would be the early diagnosis of these patients. I do not feel that one has to wait until the patient is fed to make the diagnosis. Any new-born child that has an excessive difficulty with respirations, evidence of episodes of cyanosis, or evidence of excessive salivation should be investigated by the introduction of a catheter into the upper esophagus. We do not feel that Lipiodol is necessary on these patients. If a

catheter is introduced into the upper esophagus, and it meets an obstruction, and the patient has air in the abdomen, the diagnosis is complete. Nothing further is necessary. If air is not present in the abdomen and the catheter meets the obstruction at the upper end of the esophagus, one can be fairly confident that this is a blind upper pouch with an atretic lower esophagus. If we suspect a tracheo-esophageal fistulat but there is no evidence of obstruction in the esophagus, then Lipiodol is indicated. The use of Lipiodol is dangerous in these cases. It often spills over into the upper trachea and carries debris into the lungs from the esophagus.

We do not agree that involvement of both lungs is a contra-indication to surgery as we have had several survivals with this complication. Certainly if one can obtain the patient before pneumonitis has occurred, a better result is anticipated. In all cases where an adequate repair is obtainable, an end-to-end anastomosis is the ideal way. If there is any evidence of tension an upper esophagotomy with the ligation of the distal end of the esophagus is imperative. The esophageal fistula can be established at the base of the neck, or, if a long upper segment is present, one can bring it out through the back.

INTRAMEDULLARY FIXATION

FRED E. MURPHY, M.D., Thomasville

Within the last two years, a form of internal fixation of the long bones has been established that offers great promise. This technic is intramedullary fixation. The enthusiasm for this type of procedure has grown steadily in this country, and only time and critical surveys will determine its value.

It is not my intention to review the historical background of this technic; it will suffice to say that axial fixation of bones is not a new procedure. It has been developing for the last 50 years. Even Kuntscher,[1] to whom many accredit the technic, was only one of many war surgeons applying it. Actually, the idea dates back to 1897 with Nicolaysen,[2] 1906 with Delbert,[3] 1913 with Lambotte([4] 1916 with Hey Groves[5] and 1939 with Rush and Rush[6] of the United States.

The question of whether or not the technic of intramedullary fixation is to remain as a popular choice is answered by Smith, who stated: "Before it is firmly established as a procedure of choice in the United States, it must of necessity pass through a stage of mellowing and as with any other newer method of fracture fixation, the pendulum of popularity will swing from side to side until:

A. Substantial series of cases by responsible investigators establish firmly the indications and contraindications for its use.

B. Best methods of insertion and extraction are set up.

C. Surgical instruments and pins are improved and standardized.

D. Experiments are carried out to determine the reasons for its effect on endosteal and periosteal callus.

E. A substantial series of cases is compared with previous methods as to functional results."

Nevertheless, it offers a promise not only in the treatment of some recent fractures in which the external support of splints and plaster is minimized, but also in the treatment of some fractures with delayed union, pathologic fractures and some compound fractures.

It has been thought in this country that if intramedullary fixation is to be employed, the open type should be used as it is more precise, requires less experience in manipulation, and makes the operative time more predictable. With the open type no elaborate x-ray equipment is needed, there is no prolonged anesthesia and, lastly but highly important, exposure of patient and surgeon to roentgen rays is limited.

In my experience, complications most frequently arise from this technic because of:

1. Faulty pin measurement
2. Faulty indications
3. Improper technic
4. Improper instruments.

Disadvantages are:

1. Intramedullary fixation is limited to fractures of the long bones at a sufficient distance from the extremity of the bone to insure adequate stability after the pin is inserted.

2. Endosteal bone formation is poor, and even though periosteal bone formation is abundant, it is of poor quality and gives one a false sense of security causing removal of the pin too early. Cases have been reported in which necrosis of endosteal bone

resulted from the pin being too tight, and several cases of fat embolism have been reported.

It is important to consider the problem of periosteal callus after axial fixation. It has been shown that if the fracture is not firmly fixed against axial and rotational torsion, the build-up of callus is enormous. This abundance of callus leads one to think union is firm even after a few weeks, but it has been proved that it is irritative response at the site of the fracture and not true union of bone. Street[8] concluded that axial fixation neither stimulates nor delays formation of callus provided fixation is secure, but he noted that in 89 fractures of the femur union took place only after an average of 17½ weeks.

One of the most distressing problems to me is a pin which is too short. This difficulty can of course be corrected by better roentgenograms showing the entire bone and by more accurate measurements of the pin. Roughly, one may refer to the thumb rules of Soeur[9] for pin measurements, but one may more readily avoid trouble by obtaining accurate measurements as recommended by Kuntscher.[1 10] A nail which is too short gives insufficient stability, causing angulation, rotation or even refracture of the bone at another site. It may also migrate and cause periosteal irritation of considerable degree. The distal end of the nail must in almost every instance, except when proximal to the isthmus, be firmly imbedded in the spongiosa of the metaphysis.

If the nail is too long, the disappointing results are obvious in that adjacent joints are penetrated.

Rotation of fragments is a common but often neglected problem. It is, however, extremely important and to me illustrated one of the great advantages of open technic. Faulty rotation of fragments leads to nonunion, angulation, pain and disability. Rotational alignment should be accurate and should remain so until union takes place. Prevention of this disabling complication is through using:

1. Open technic
2. A nail of sufficient length and width
3. Additional transfixion wires or screws

If the nail is too thick, it may split the bone or stick in the canal, necessitating the use of a hack saw. As stated before, a pin that is too tight may cause necrosis of endosteal bone.

Before I discuss specific sites for intramedullary fixation, it is appropriate to mention the statement of Bohler,[11] "If the patient is not allowed full use of the extremity after axial fixation, there is something wrong." Von Saal observed, "Fixation of a fracture is most secure immediately after insertion of the pin if it is done properly."

Femur

The ideal site for intramedullary fixation of fractures of the femur is the middle third. Unless the pin can extend beyond the site of the fracture at least 4 inches, it should not be used.

A listing of the problems involved in nailing femoral fractures follows:

1. In elderly persons there is a considerable degree of anterior and lateral bowing which may complicate the technic.

2. Particular attention should be paid to the lateral or medial placement of the femoral nail in the greater trochanter. It has been shown that a nail placed too far medial to the greater trochanter causes the fracture to angulate. Likewise, a pin placed too far laterally causes a coxa vara deformity.

3. Incomplete fracture lines, if they remain unfastened, may lead to angulation.

4. It is noteworthy that a number of patients have a typical gluteus medius limp after intramedullary fixation. The cause is not clear, but interference with leverage of the gluteus medium by the pin may be an important factor. At any rate, strengthening of this muscle should be instituted early.

5. Femoral nailing before epiphyseal lines have closed is not advocated because of the danger of disturbing growth.

6. It is an important fact to bear in mind that nailing is a shocking procedure. If all the complications are considered first, unnecessary driving of the nail with force and then extracting it can be avoided, and the shock to the patient will be less. To avoid most complications, accurate measurement of the nail is the most important part of the procedure.

7. Inaccurate reduction is still an important complication resulting in shortening, instability and torsion of the distal fragment.

8. It is easy for the guide wire to course either outside the distal fragment or against the medial or lateral walls of the distal tube, finally penetrating these walls. This problem can be avoided to a great extent by accurate reduction of the fracture before insertion of the guide pin.

9. Splitting of the bone may occur if the pin is driven on the outside of the greater trochanter, causing it to course from the side instead of being driven from directly above.

10. If the nail is too short, immobilization is inadequate and may lead to angulation, shortening, rotation and migration. There may also be great periosteal reaction and sometimes refracture below.

11. Fracture of the nail is usually caused by angulatory strain on the nail resulting from improper size of the nail or the omission of supplementary fixation such as a cast.

In summary, the usual complications of fixation of fractures of the femur can be avoided by accurate measurements of the nail, perfect reduction, and accurate placement of the nail in the trochanter so that it may be driven directly down the medullary canal. The most positive indication for this technic is in fractures approximately 3 inches from either femoral extremity.

Tibia

In fractures of the leg below the knee axial fixation has not met with the enthusiasm accorded this treatment in fractures of the femur. Kuntscher[10] and Bohler[11] have more or less abandoned its use at this site because of the complications involved.

Intramedullary fixation is seldom good enough to

prevent rotational or torsional strains unless external fixation (cast) is used. It is unsafe to permit unsupported weight-bearing on the tibia after fixation with a nail because of these factors; so to repeat Bohler's observation, "If the patient is not allowed full use of the extremity after axial fixation, something is wrong." To date there is no "sure fire" method of handling fractures of the tibia, and certainly results from experienced surgeons using intramedullary fixation have shown that this method is not superior to older methods of treatment.

Because of torsional strains the intramedullary nail is of no value in long spiral and long oblique fractures. If a nail is to be considered, the best sites are transverse or short oblique fractures involving junction of the middle and upper third and those of the middle and lower third. Pins are also excellent in segmental fractures provided a cast is used for additional insurance against torsional strains.

In the lower portion of the leg it is often difficult to introduce the pin. I have found that flexion of the knee during introduction of the pin gives one a direct shot down the tibial canal.

Often one sees spiral fractures with a long butterfly fragment. These fractures to me are difficult to treat, and I am not convinced that intramedullary fixation is the superior technic when they can so aptly be fixed with transfixion screws and a plaster cast. If medullary nailing is employed, fixation is usually insufficient, requiring a screw for the butterfly fragment and a plaster cast.

Again ,measurement of the nail is most important. If the nail is too large, there is danger of splitting the cortex, or one will find that the nail cannot be driven far enough. At times it may stick in the narrowest part of the medullary canal and be most resistant to extraction.

A nail too thin or too short causes angulation or rotatory displacement which may occur late. This complication leads to more real despair than any other.

On driving the tibial nail, it is imperative that one hold the nail flatly against the knee so that it will not get caught against the posterior wall of the canal. The tip of the nail is usually oblique and bounces off the posterior wall and courses on down the canal if held flat again the knee. The angle at which the nail is driven into the tibia causes grief if it is too steep, for the nail bends and sticks.

Often after the nailing of a tibia, callous formation may be delayed. If so, the fragments were not impacted, and as healing progresses, the fibula unites first, and the nail merely struts the fracture, keeping the ends from apposition. The nail in tibial fixation is usually curved, not allowing telescoping of the fracture on weight-bearing. It is therefore recommended that, after six weeks, if there is no callous formation at the site of the tibial fracture, fibular osteotomy be considered.

Since fixation in the canal of the tibia is often not tight, one must be constantly on the alert for migration of the pin either upwards, distalwards or from side to side in the spongiosa of the lower portion of the tibia. This, as one can readily understand, is the cause of fracture redisplacements and the untoward results.

Kuntscher[10] gave as one of his reasons for discontinuing nailing of tibias the theory that behind intramedullary nailing is internal splint replacement, and this cannot be accomplished in the tibia because the fixation alloy must be malleable in order to conform to the curve of the tibial canal; so torsion of the bone is almost impossible to overcome. Again, if the metal must bend, approximation of the fragments is hindered.

Humerus

The anatomic complications in the humerus are about the same as those associated with the other long bones. For stable fixation the site of the fracture must be within 3 to 4 inches from the distal end and from 2 to 3 inches from the proximal end. Fractures that are splintered, long spiral and with a butterfly fragment are complicated ones to nail unless additional fixation is used, such as screws, wire or spica cast.

An interesting anatomic complication may occur if nailing of a lower third is accomplished allowing the distal fragment to protrude a bit posteriorly causing irritation of the triceps tendon.

Mechanically again, measurement of the pin is most important, for the pin which is too short and too thin causes rotation and angulation. The pin must engage cancellous bone at the distal end. A careful watch must be kept for migration of the pin either up, down or sideways.

For accurate fixation, if the pin is driven from above, it must extend 4 inches beyond the site of the fracture. If the nail is driven from below, it must reach within one-half inch of the humeral head to insure imbedding in spongy bone. If indications and fixation of the fracture have been good, no external splint is needed; if not, axial fixation was a waste of time.

With regard to treatment of pseudarthrosis of the humerus, Kuntscher[10] concluded axial fixation offers no particular advantage over the older methods because a spica cast must be used. If no external support is used in old cases of this type, the weight of the elbow and little muscle tone cause the fragments to distract. This tendency may be somewhat overcome by additional wire sutures.

Forearm

Anatomically, fractures in the forearm less than 3 inches from the distal or proximal end of the bone are unsuitable for nailing. Isolated fractures of the ulna must be at least 1 to 2 inches from the proximal end and 3 inches from the distal end. Isolated fractures of the radius must be at least 2½ inches from the proximal end and 4 to 5 inches from the distal end.

The same mechanical factors of nailing elsewhere govern the technic here. The nail must be of accurate measurement. It is important to note that in the distal end of the ulna the medullary canal is extremely narrow; a nail driven with too much force will stick there.

Protrusion of the nail slightly more than one-third inch from the elbow causes pain. Likewise, the nail driven in at the distal end of the radius between the thumb extensors must be flush in order not to cause pain.

Clavicle

Axial fixation of the clavicle is not devoid of complications. Anatomically, comminuted and long spiral or oblique fractures can be more appropriately treated conservatively.

If open operation is resorted to, roentgen ray visualization of the proximal end of the pin must be employed during its performance to prevent the pin from entering the chest. Experience has shown that often the pin will migrate medially, entering the chest; so to avoid this complication a threaded pin has been described by McKeever.[2] The pin must be strong enough to support the weight of the arm.

Summary

In summary, the complications of intramedullary fixation in general have been presented as well as some of those involving individual long bones. It is concluded that each long bone must of necessity be considered on its own merit with regard to suitability for fixation by this technic. The only constant and general consideration is the size of the pin.

References

1. Kuntscher, G.: Intramedullary Nailing; Clinical Study, Klin. Wchnschr. 19:833-835 (Aug. 17) 1940; also Arch. f. klin. Chir. 200:443-455, 1940.

2. Nicolaysen, J.: Om larhalsfrakturens behandling med nagling. (Les resultates du traitement del la fracture du col du femur par le clouement C.-r., No. 32, 5.) Nord. med ark., Stockholm, 1899, n.F., X, No. 29, 1-12.

3. Delbert, P.: Appareil de marche pour fracture du femur, Bull. et mem. Soc. de chir. de Par., 1905, n.s. 31:995-997.

4. Lambotte, A.: Chirurgie operatoire des fractures, Paris, Masson et Cie, 1913.

5. Groves, E. W. H.: Ununited Fractures with Special Reference to Gunshoe Injuries and the Use of Bone Grafting, Brit. J. Surg. 6:203-247, 1918.

6. Rush, L. V., and Rush, H. L.: Technique for Longitudinal Pin Fixation of Certain Fractures of Ulna and of Femur, J. Bone & Joint Surg. 21:619-626, 1939.

7. Smith, H.: Campbells Operative Orthopedics. Lippincott and Company.

8. Street, D. M.: One Hundred Fractures of the Femur Treated by Means of the Diamond-Shaped Medullary Nail, J. Bone & Joint Surg. 33A:659-669; 678 (July) 1951.

9. Soeur, R.: Intramedullary Nailing of Diaphyseal Fractures, J. Bone & Joint Surg. 28:309-331 (April) 1946.

10. Kuntscher, G.: Recent Advances in the Field of Medullary Nailing, Ann. chir. et gynaec. Fenniae 37:115-136, 1948.

11. Bohler, L.: Medullary Nailing of Kuntscher, translated by Hans Tretter, Baltimore, Williams & Wilkins Company, 1948.

12. McKeever, F. M.: Fractures of Tarsal and Metatarsal Bones, Surg. Gynec. & Obst. 90:735-745 (June) 1950.

PRESS COMMENT:

—*Action in Bibb County*

Action by the Bibb County Medical Society in voting to admit to full membership in its organization local qualified Negro doctors is a fine step toward improved race relations in our community.

It sets an example for other medical groups in our state and the South and will work toward better health standards and administering to medical needs of citizens of our community, particularly the Negro race.

For many years Negro doctors have been forbidden to practice in the city owned Macon Hospital. Even though their patients required treatment at the hospital, the Negro physicians who had handled their cases at home, could not continue the case in the hospital.

This ban discouraged ambitious young Negroes who sought to become doctors themselves.

With forthcoming construction of Macon's new hospital, ample provision and facilities will be made for doctor of all races and Negro physicians will be encouraged to handle their own cases, thus relieving some of the demands on other physicians.

This step by the Bibb Medical Society will further encourage the training and practice of competent, qualified and talented Negroes as members of the medical profession.

Only when adequate Negro doctors are available will the health of those citizens in our community be properly cared for. It is impossible for the limited number of present doctors to do so.

Since membership in the society, now open to both white and Negro doctors, is based on individual qualifications, professional training and competency, this goal should stimulate even higher medical standards.

The Bibb County Medical Society is due the hearty commendation of our community.

—Macon Telegraph.

MILFORD B. HATCHER, M.D. and *MAX MASS, M.D.*, Macon

OPERATIVE CHOLANGIOGRAPHY

Since surgery of the biliary tract has been practiced, one of the outstanding problems has been, "Is the common duct free of obstruction?" We do not believe that there is a surgeon performing this type of surgery who has not been aware of his shortcomings and who does not retain a feeling of uncertainty concerning the "left stone" in the ductus choledochus.

Several years ago we concluded that we should attempt to find some method by which we could decrease our incidence of overlooked stones and other complicating factors following surgery of the biliary tract. It was noted that Professor Marrezi, professor of surgery of the Medical Faculty of Cordoba, Argentina, started making cholangiograms in 1931.

Until recently operative cholangiography has not been adopted chiefly because of the prolongation of the operating time and difficulty in the interpretation of what has generally been considered "techincally inferior" films. We believe that now the operating time is not unduly prolonged and that it is possible to obtain good cholangiograms on the operating table.

We are recommending cholangiography because it can be a most gratifying and beneficial procedure which gives dividends in a number of conditions requiring surgery of the biliary system. Primarily, one can get an anatomic visualization of the extrahepatic biliary system, which has a high incidence of variation. We know that the common bile duct has no constant pattern or position, and that the surgeon must be conversant with the anatomic variations of the extrahepatic biliary system if surgical treatment is to be effective.

A visualizing cholangiogram made as soon as the abdomen is open will give the anatomic variations and positions of the biliary tract. A cholangiogram properly made and interpreted in this stage, at which time the dye is injected with a needle into the common duct, cystic duct, or even the gallbladder, may make exploration of the common duct unnecessary. Some have recommended that after the cystic duct is transected, the contrast medium be introduced into the common duct through the stem of the cystic duct by means of a ureteral catheter or cannula.

Injection of the contrast medium into the common duct or even through the wall of the gallbladder is beneficial in demonstrating stones, strictures, spasm (dyskinesia), carcinoma, or other tumors and obstructions. Although we have had no experience with cholangiography in cholecystoduodenal, cholecystogastric, or other internal biliary fistulas, we believe it should be beneficial. We have used it in external biliary fistulas with satisfactory results.

By demonstration of the configuration of the ductus choledochus, it will decrease the possibility of passing an exploring probe through the wall of the duct, thus forming an internal biliary fistula. In exploring the common duct, one will frequently probe in a vertical plane, believing this to be the normal position of the ductus choledochus. It is noted that frequently the common duct assumes a horizontal position, and we realize that the ampulla of Vater is the most lateral portion of the biliary system.

We all realize that the exploration of the common duct at the time of removal of an acutely inflamed gallbladder is a difficult and hazardous procedure. The incidence of removal of acutely inflamed gallbladders has increased in recent years, and frequently these gallbladders have stones causing a blockage, and also there are stones in the common duct. A choledochogram may give a wealth of information at this time.

Cholangiography is a great aid in getting adequate exposure of the common and hepatic ducts, especially in secondary operations, and it has been used in surgery for congenital anomalies. It may be used beneficailly in a gastric resection in determining the termination of the common duct when the ulcer is low on the duodenum near the common duct.

We still believe that the best cholangiograms can be obtained from injection of dye within the T tube. It is not always necessary, however, and it is not always advisable to insert a T tube. Additional advantages of having a T tube inserted and obtaining a cholangiogram prior to removing the T tube have been demonstrated by us in several cases in which stones have apparently been washed down from the liver after the initial exploration of the common duct and cholangiogram. Stones have been found in the

Read before the Bibb County Medical Society, Macon, Jan. 4, 1952.

liver radicles of the biliary tract at autopsies.

Since November 1949, cholangiographic studies have been carried out at the Macon Hospital. Fifty-one cases were studied by postoperative T tube instillations alone. In 7, or 13.8 per cent, residual stones were found after choledocholithotomy. Palpation and instrumental exploration afford little assurance that all calculi have been removed from the common duct.

Technic

The operating room procedure is made possible by the use of a Potter-Bucky unit with sufficiently powerful portable x-ray machine to allow exposures not exceeding one second. The Bucky unit is incorporated in the operating table before the patient is brought in, and a 10 by 12 inch film is used to cover the field. The equipment is well grounded, of course, to prevent igniting explosive gases. The x-ray unit is easily placed out of the way of the surgeon and the assistants. The cystic duct, gallbladder, or common duct may be injected before removal of the gallbladder ,and 10 to 20 cc. of 35 per cent diodrast solution is injected into the common duct through a large bore needle just below the tied-off cystic duct or T tube. About 5 cc. of 1 per cent procaine solution is injected prior to injection of the dye. Before injection of the dye, it is imperative to remove all of the air as air bubbles can resemble stones. When the technician is ready to make the exposure, upon signal from the surgeon, he tells the anesthetist to suspend momentarily the patient's respiration and makes the exposure. The film is then developed within a few minutes in the operating room darkroom.

The cholangiogram is examined by the radiologist for evidence of anomalies and residual stones, and a decision can then be reached whether or not to open the common duct. It has been found expedient, even with normal cholangiograms, to insert a T tube when stones have been found in the gallbladder because of the possibility that some of the stones are obscured within the intrahepatic radicles.

We are impressed in postoperative cholangiography, with the great likelihood of technical error in the proper selection of the T tube. Avoid a common error of placing one limb of the T tube in the stump of the cystic duct. This may be serious, resulting, at times, in persistent drainage, obstruction with jaundice, and sometimes rather severe pain due to distention of the common duct by the obstruction (Fig. 4). Sometimes a long arm of the T tube may extend high into the right hepatic duct, thereby closing off the left branch of the hepatic duct and producing distention of the biliary radicles above the site of obstruction. It is also most important to get a T tube of proper size, not one too large.

Postoperative cholangiography may be performed on about the seventh to twelfth postoperative day. By this time edema due to instrumentation will have subsided. Generally, some degree of pancreatitis present at the time of operation will also have regressed, making possible a more accurate evaluation. For the postoperative cholangiogram the patient needs no special preparation. The radiologist removes the abdominal dressings and applies a Luer-Lok adapter to the end of the drainage tube. A 20 cc. syringe containing 35 per cent diodrast solution is used. A preliminary spot film is made under fluoroscopic control, and then the solution is injected, always after a careful extraction of all air by cautious withdrawal of the plunger. The injection is made slowly, and the filling of the biliary tree is carefully observed. In most instances, a 15 degree Trendelenburg position will allow adequate filling of the hepatic radicles. If an impediment is encountered, no forceful injection should be used, but rather a careful effort should be made to determine the cause. Spot films can be made and quickly developed for better detail before proceeding. The presence of air bubbles can serve as a great source of confusion since it is sometimes impossible to differentiate them from stones. Change in position and in configuration of the shadows is apparently unreliable for differentiation. A tablet of nitroglycerin, 1/100 of a grain placed under the tongue, will often serve to make differentiation possible, after about three minutes, between functional dyssynergic spasm and organic obstruction. We have been impressed by the frequency of occurrence of so-called silent common duct stones and also by the difficulty the surgeon encounters in removing biliary stones even after the most painstaking exploration.



Fig. 1. Note encroachment of upper limb of "T" tube on right hepatic duct.



Fig. 2. Note anomalous cystic duct entering common duct on medial aspect.



Fig. 3. Abnormal course of common duct, residual stones and calculous obstruction at intramural portion.

Illustrations

Figure 1 illustrates a normal postoperative T tube cholangiogram intubated through the cystic duct aperture and showing a normal caliber. The upper limb of the T tube, however, encroaches sharply on the right hepatic bile duct, interfering with proper filling. The 68 year old white woman in this case had a thickened gallbladder containing several faceted mixed calcium bilirubin stones. The common duct was explored, and several stones were removed. The postoperative course was uneventful. The tube was removed after 10 days.

Figure 2 shows an anomalous cystic duct emptying into the choledochus on the medial aspects, necessitating leaving a long cystic duct stump. In this case there was an uneventful 12 day period of hospitalization.

Figure 3 illustrates an abnormal common duct course with residual stones, obstruction, and moderately dilated choledochus. In this case a white woman, aged 54, had had the gallbladder drained and stones removed six years before. A postoperative cholangiogram, made after surgery had revealed an atrophic thickened gallbladder containing pultaceous and calculous material, showed persistent stones in the common duct despite its careful exploration. These stones persisted during three separate examinations over a period of two months. The patient was again subjected to exploration, the stones



Fig. 4. Note erratic intubation of upper end of "T" tube in stump of cystic duct. These stones could not be found when patient was re-explored.

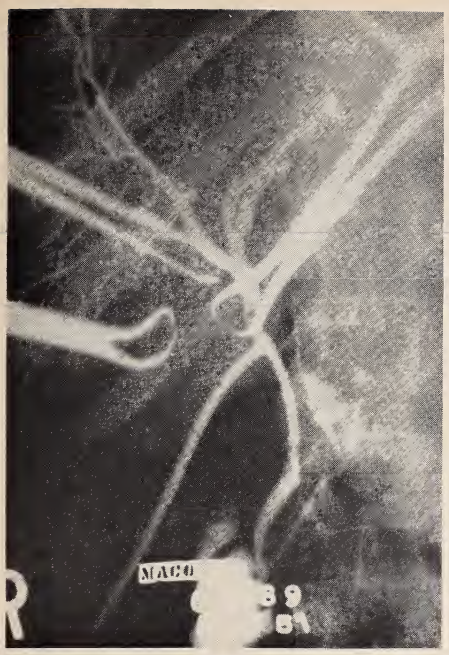


Fig. 5. Normal operative cholangiogram.



Fig. 6. Air bubbles. These shadows were made to disappear upon careful withdrawal of plunger of syringe.

were removed, and a long arm T tube was inserted through the ampulla into the duodenum. Her recovery was slow but uneventful.

Figure 4 shows the intubation of the cystic duct by a T tube in a white man, aged 41, with persistent jaundice but no pain. There are several faceted stones in the lower segment of the common duct, and one stone is seen to obstruct the ampullary portion. The patient was again subjected to exploration, but, even with the most painstaking search, only one small stone could be found. Subsequent examinations again showed the stones, which are presumed to be of the migratory type. The patient, an alcoholic, forcefully removed the tube and would submit to no further examination.

Figure 5 shows a normal operative cholangiogram made after removal of the gallbladder. It illustrates visualization of the main pancreatic duct of Wirsung and proper emptying into the duodenum.

Figure 6 illustrates a common source of error. The shadows indicated by arrows were made to disappear following careful withdrawal of the plunger and change of the patient's position. These are presumed to represent air bubbles. The patient in this case was a 54 year old white man who at operation had a thickened gallbladder filled with stones and dense pericholecystic adhesions. An exploration of the common duct was carried out, and a somewhat cloudy and granular bile was removed. The patient remained in the hospital for 11 days. The entire course was uneventful.

Summary

Cholangiography is a valuable aid in biliary surgery.

Close cooperation between the surgeon and the radiologist is necessary for the best results.

The many possibilities for technical error on the part of the surgeon and radiologist must be thoroughly understood.

Contrast cholangiography will undoubtedly improve the results in biliary surgery.

REFERENCES

Hicken, N. F.; Coray, Q. B., and Franz, B.: Anatomic Variations of the Extrahepatic Biliary System as Seen by Cholangiographic Studies, Surg., Gynec. & Obst. 88:577-584 (May) 1949.

Lounsbury, B. F.; Douglass, T. C., and Carroll, W. C.: Operating Room Cholangiography, Quart. Bull. Northwestern Univ. M. School 24:169-171, 1950.

Mirizzi, P. L.: Operative Cholangiography; Its Contribution to Physio-Pathology of Common Bile-Duct, Lancet 2: 366-369 (Aug. 13) 1938.

Partington, P. F., and Sachs, M. D.: Routine Use of Operative Cholangiography, Surg., Gynec. & Obst. 87:299-307 (Sept.) 1948.

Smedal, M. I., and Sornberger, C. F.: Cholangiography, S. Clin. North America 28:605-611 (June) 1948.

Sterling, J. A.; Friedman, P. S.; Ravel, V. P., and Solis-Cohen, L.: Analysis of Postoperative Cholangiograms, Surg., Gynec. & Obst. 89:292-298 (Sept.) 1949.

Special Articles

One Year of Operating Experiences of 17 New Hospitals Built Under the Hospital Facilities Construction Program (Hill-Burton)

RALPH C. WILLIAMS, M.D., Atlanta*

Twenty-nine new hospitals have been opened in Georgia as of September 1, 1952, under the Hospital Facilities Construction Program, popularly known as the Hill-Burton Act. Interest is frequently expressed as to the progress that these hospitals are making, the difficulties encountered, and the success or failure of their activities in general. To secure specific information regarding the new hospitals constructed in Georgia, a study has been recently completed of the experience of the 17 hospitals that have been in operation for at least one year. In some cases certain of these hospitals have been running for more than one year. The information presented here relates only to the first year of operation of each of the hospitals studied. The hospitals included in this group vary in size from 16 beds to 155 beds.

The Hospital Facilities Construction Act is the first substantial gesture toward a national program for assisting in making hospital care available for the average citizen and his dependents. The enactment of this legislation was the result of teamwork between hospital organizations, physicians, public health workers social welfare representatives, and taxpayers as represented by the general public.

The Hospital Construction Program was inaugurated in Georgia in 1947. At this time a statewide survey was made for the purpose of determining the status of individual communities throughout the State relative to the need for hospital beds. In Georgia a great deal of emphasis has been given to community studies and program planning. The first year of the program was spent in making an inventory of the need for hospital facilities and medical care in the State. There was frequent consultation with a State Hospital Advisory Committee. A master state plan for the improvement and expansion of hospital facilities and services was formulated after the expenditure of a great deal of time, effort and careful thought.

Studies made at the beginning of the program in 1947 indicated that: (1) Georgia, with a population of more than 3,000,000 people, had only one-half the number of general beds needed based on an estimate of 4.5 beds per thousand population; (2) there were 60 counties in the State without a hospital of any type; (3) almost all of the specialists and more than one-half of the physicians of the State were in practice in the eight most populous counties with one-third located in Atlanta and Fulton County;

*Chairman, Committee on Maternal Care, Medical Association of Georgia.

*Director, Division of Hospital Services Georgia Department of Public Health, Atlanta, Georgia.

(4) about one-half of the babies born in the State were delivered in hospitals and 70 per cent of all deaths occurred without the benefit of medical care in a hospital. Infant and maternal mortality rates were among the highest in the nation.

However, medical care services in Georgia compared favorably with that of other southeastern states. Statistical averages can often be misleading in a State like Georgia that covers a large geographic area. There exists great variations in the State in regard to density of population, wealth, per capita income, hospital facilities as well as medical, nursing, and technical personnel to administer to the needs of the people. This unusual distribution of medical care facilities has been one of the prime factors considered in planning for the expansion of hospital facilities. Some of the difficulties to be overcome may be briefly summarized as follows:

(1) Georgia has 159 counties. It is predominantly a rural State with all the inherent problems of providing medical care in sparsely populated areas with limited financial ability.

(2) Each of the 159 counties constituting the commonwealth of Georgia are political autonomies that guard their prerogatives, so that the raising of funds for a hospital to be located in another county, but to be used jointly, was beyond the conception of some county officials and citizens.

(3) Eighty-six counties in Georgia experienced population decreases between the 1940 and the 1950 census. These decreases ranged from one to 20 per cent. To interpret these population changes as related to hospital planning is extremely difficult.

After the completion of the statewide survey, an effort was made to appraise the hospital needs on an area basis. This area is similar to but not identical with the trade areas of the State; that is, the industrial and commercial activities that center around various towns and cities. The several hospital areas were arranged in a priority sequence; those with the fewest hospital facilities being placed in the highest priority and so on according to the status of existing hospital beds by areas. Thus was set up priority groups designated as "A," "B," "C," and "D." Those in the "A" priority area were given immediate consideration within available funds. As projects were approved and hospital construction begun, the status of communities along down the priority line advanced; thus bringing up in orderly sequence various geographic areas for consideration and approval of individual requests for assistance in building new hospitals or enlarging existing facilities.

The fundamental purpose of the hospital construction program is to assist areas of the State with the greatest need and least financial abilities so as to provide a more equitable distribution of medical and hospital care. The majority of the projects to date have been 50 beds or less and are located in the smaller towns. In the beginning of the program, there was the impression that almost any ambitious small town could secure a new hospital because Federal and State funds would provide most of the cost of construction. In cooperation with communities, the Division of Hospital Services through surveys and conferences, assists local leaders to determine need for, as well as ability to successfully finance, staff, and operate a hospital. This careful study of individual requests has resulted in the elimination of specific questionable projects in high priority areas.

With the more urgent needs of the smaller towns and cities in the process of being met, the metropolitan areas are reaching a higher priority and the program will move toward the improvement of existing hospital facilities and more extensive construction projects in the larger cities of the State. Planning for new and improved hospital services in large metropolitan areas presents problems quite dissimilar to those of the smaller towns. The large metropolitan areas are encouraged to assume this responsibility.

The volume of service rendered by these new hospitals in Georgia during the first year of operation is of interest. The normal experience throughout the United States, which has proven to be equally true in Georgia, is that a new hospital will be doing exceedingly well if its occupancy averages thirty per cent of its beds during its first year of operation.

The 17 new hospitals that are here being reported upon, varied from a low occupancy rate of eight per cent to a high of 63 per cent, with an average of 39 per cent. The larger hospitals, as expected, experienced the higher occupancy rates,. The smaller hospitals have less bed flexibility to meet the varying demand by race and sex, and few of them replaced an existing hospital with an established service area. The admissions to these hospitals varied from the lowest number with only 137 patients admitted within a year to the highest of 4,701 patients admitted, with an average annual admission of 1,894 patients for these 17 hospitals. The number of patient days varied from 461 to 23,223, with an average of 9,096 per hospital. With the opening of these 17 new hosptals, 14 old or obsolete hosptals with a total of 285 beds were closed. Six of the hospitals were in communities without existing facilities and prior experience in operating a hospital. The volume of work on the several services of these hospitals is of interest. Admissions to services were distributed as follows: 38 per cent to the medical services, 21 per cent on the surgical services, 20 per cent on the obstetrical services, and 21 per cent on the various other services. Of the 17 new hospitals that are included in this study, five have requested enlargement. The volume of the work required of them since they have been in operation makes it imperative that they seek an expansion of their facilities. It seems probable that it will be necessary to enlarge all five of those now requesting further assistance. Several of these new hospitals have by the excellence of their services attracted patients from a much larger area than had been expected.

The question is frequently asked as to the difficulties experienced in securing personnel to operate the new hospitals. There have been no significant delays in the opening of new hospitals because of the shortage of hospital personnel. Two hospitals have been unable to use all beds because of inability to secure a sufficient number of registered nurses. The ratio of hospital personnel to patients in these seventeen new hospitals varied from 1.8 hospital attendants to each patient to 4.5 with an average of 2.8 hospital personnel to each patient served in the hospital. As might be expected, the smaller hospitals (the nine hospitals in this study of from 16 to 39 beds) showed the highest and lowest ratio of personnel per patient. The number of registered nurses in all hospitals varied from 0 to 34, with an average of 10 registered nurses per hospital. In the smaller hospitals the average was 3.5 registered nurses per hospital. The average in the hospitals above one hundred beds was 27.5 nurses per hospital.

One of the ways in which the shortage of registered nurses has been met is the training of persons to serve as nurses aides. These auxiliary personnel have performed very useful and effective service under direction in caring for patients and doing those things which could be delegated to them by the registered nurses. Special training programs to prepare nurses aides are conducted in several hospitals. The average ratio of nurses aides to registered nurses was 1.5 aides to each registered nurse. Some hospitals use as many as three aides for each registered nurse. One significant fact developed in the study is that the turn-over in administrators at the new hospitals has been rather high. The average is almost two administrators per year at these new hospitals. One hospital is known to have had three administrators within its first year of operation. Physicians on the active staff of these hospitals varied in number from one to 61 with an average of 15 physicians on the active medical staff at each hospital. In the smaller hospitals the average was five physicians per hospital. In the middle group the average was 13 physicians per hospital.

An important by-product of this construction program of new hospitals has been the attraction of competent, well-trained physicians to the smaller towns. By actual count it has been found that more than 55 physicians have been attracted to the towns and cities where these new hospitals have been constructed. Nine of the new hospitals have inaugurated consultation service, largely in the fields of roentgenology and pathology.

From a financial standpoint, the record made by these hospitals has been unusually gratifying. Normally it is expected that a new hospital will operate at a deficit during its first year due to low occupancy and any hospital is considered extremely fortunate if it does not have a deficit for its second year of operation.

Twelve of the 17 reported a deficit for the first year. Five of the number reported that their first year of operation was without financial loss. The estimates of deficits set up by these hospitals in planning for their first year of operation varied, depending on size, from $10,500 to $100,000 or an average deficit of $33,000. The actual experience indicated that the losses sustained by those showing loss, varied from $4,407 to $53,856 with an actual average operating loss of $19,664. It is interesting to observe that the actual losses were appreciably below the minimum, maximum, and average losses that were estimated and anticipated prior to construction. The five hospitals that operated without a loss showed operating surpluses varying between $2,406 and $20,369 with an average annual operating surplus of $8,713.

A significant factor in the successful operation of a hospital in any community is the extent of hospital insurance held by the prospective patients living in the community. The ratio of patients with insurance protection in these hospitals varied from 15 per cent to 85 per cent, with an average coverage of 59 per cent of the admissions. At 12 of these hospitals there was provision by contract for payment of hospital care for the indigent, usually from tax funds. This was of substantial financial assistance to the hospitals. Hospital cost per patient day for the seventeen new hospitals averaged between $14.00 and $15.00 which compares favorably with the average cost for other hospitals in the State.

The operating experience of these 17 hospitals during their first year of service to their communities may be summarized as follows:

(1) The smaller hospitals of 50 beds or under, as a group, have experienced less financial difficulty than the larger hospitals. The most common reasons given for deficits were uncollected accounts, low occupancy rates during the early months, and lack of arrangements for indigent medical care from adjoining counties.

(2) The construction of new hospital facilities in the smaller cities and towns has resulted in a better distribution of physicians in the State. More than 50 additional physicians have moved into various communities since the new hospitals were opened. An appreciable number of these physicians are trained specialists.

(3) Of the 17 new hospitals that have been in operation for one year or more, six are in counties without any previous hospital facilities. The remaining eleven new hospitals have resulted in the closing of 14 sub-standard hospitals or clinics with a total capacity of 285 beds.

(4) All of thhe 17 new hospitals that have been in operation for one year or more serve Negro patients and appear to be rendering a reasonable amount of indigent hospital care to indigents. Many of the counties of the State are now beginning to assume their rightful obligations and are making available, for the first time, hospital and medical care for the indigent and less fortunate citizens.

(5) The staffing of these new hospitals has been a problem; yet despite the present shortages of medical, nursing, and technical personnel, ways and

STATUS OF SEVENTEEN HILL-BURTON HOSPITALS WITH 934 BEDS AFTER ONE YEAR OF OPERATING EXPERIENCE AS OF SEPTEMBER 1, 1952

Items of Experience	*All Size Hospitals*			*9 Hospitals (16-39 Beds)*			*4 Hospitals (40-99 Beds)*			*4 Hospitals (100-155 Beds)*		
	Low	*Average*	*High*	*Low*	*Average*	*High*	*Low*	*Average*	*High*	*Low*	*Average*	*High*
A. *Personnel Problems*												
Personnel-Patient ratio	1.8	2.8	4.5	1.8	2.7	4.5	2.2	2.6	3.0	2.3	3.0	3.6
Physicians attracted	0	55*	12	0	19*	6	0	7*	4	3	29*	12
Consultant service	0	10.0	34		4*			3*			2*	
R.N.s per hospital		9*		0	3.5	7	5	6.3	9	20	27.5	34
Aides per R.N.		1.5			2.5			1.5			1.0	
Administrators per hospital	1	1.7	4	1	2	4	1	1.2	2	1	1	1
Physicians on active staff	1	15	61	1	5	11	10	13	16	15	27	61
B. *Patient Service*												
Admissions	137	1,894	4,701	137	773	1,382	878	1,662	2,680	2,354	3,248	4,701
Patient Days	461	9,096	23,223	461	3,524	5,240	4,708	7,390	11,487	11,230	16,375	23,223
Occupancy rate (%)	8	39	63	8	36	55	30	38	41	27	42	63
Hospitals closed	0	15*	4	0	3*	1	1	7*	4	1	5*	2
Hospital beds replaced	0	287*	78	0	38*	8	0	56*	33	41	193*	78
Type of hospital services (%)												
Medical	16	38	80	23	46	80	34	41	45	16	28	48
Surgical	5	21	54	5	28	54	5	17	26	18	19	20
Obstetrical	9	20	31	9	22	30	12	15	20	15	23	31
Other	0	21	39	0	2	8	16	27	39	18	30	37
Hospitals requesting addition		5*			4*			0*			1*	
C. *Financial*												
Hospitals reporting losses		12*			5*			3*			4*	
Hospitals reporting surplus		5*			4*			1*			0	
Estimated operating losses	$10,500	$33,000	$100,000	$10,500	$16,000	$25,000	$12,500	$28,000	$60,000	$32,000	$55,000	$100,000
Actual operating losses	4,407	19,664	53,856	5,515	13,880	18,881	4,407	25,300	53,856	9,598	26,500	48,069
Actual operating surplus	2,406	8,713	20,369	3,856	14,000	20,369	2,406		2,406			
Patients with insurance (%)	15	59	85	15	43	65	40	68	85	50	67	75
Provisions for indigent care		12*			6*			3*			3*	

*Total for all hospitals in group instead of average for the item.

9 Hospitals (16-39 Beds)		*4 Hospitals (40-99 Beds)*		*4 Hospitals (100-155 Beds)*	
Richland	Adel	Carrollton	Thomaston	Columbus	Griffin
Greensboro	Dawson	Elberton	Waynesboro	Marietta	Gainesville
Camilla	Arlington				
Sylvester	Baxley				
	Royston				

means have been found to operate the small hospitals as well as the large hospitals.

Conclusions

Several preliminary conclusions seem to be justified from the experience gained during one year of operation of 17 new hospitals in Georgia:

(1) A small city or town with limited resources can successfully provide hospital service when:

(a) All available community resources are organized in support of the hospital,

(b) A qualified medical staff can be assembled,

(c) The city and county make provision for indigent hospital care,

(d) There is a broad coverage of hospital insurance in the community to be served.

(2) The 17 new hospitals operating in Georgia have provided a high standard of medical care that is needed by the citizens of these communities, and the 55 new physicians attracted to these communities indicate the program has resulted in a better distribution of medical personnel in the State.

(3) A program of State and Federal assistance for improved hospital and medical care can be successfully planned and administered without political interference.

The outstanding accomplishment of this program is that many excellent small community hospitals are now in operation and are being administered by non-political hospital authorities, admitting patients in need of hospital care without restriction because of race, or economic status, and with medical staffs opened to all qualified physicians in good standing. With the aid of modern facilities these new hospitals are now serving persons in need of medical care in the more rural areas to an extent never before thought possible.

So far no way has been found to reduce the cost of hospital care so as to bring it within the financial reach of all citizens. There three sources of financial support for hospital service:

(1) Patients who receive treatment in the hospital,

(2) Donations from philanthropic citizens,

(3) Tax funds for the indigent and medically indigent.

Those in need of hospital care, whether they are unable to pay any or part of the costs, should receive this service. Donations from private sources and payment of tax funds are necessary or the pay patients of the hospital will be faced with increased rates. The most equitable plan would appear to be broad expansion of hospital insurance in all communities, with such tax assistance to provide hospital service for the medically indigent as may be necessary. With organized community support, the cooperation of the medical profession, and with some assistance from tax sources, the smaller community hospitals erected under the Hospital Facilities Construction Program can make a real contribution to the health of the people of our State. These new hospitals do not appear to be an undue financial burden that the citizens and taxpayers are unwilling to assume for the services rendered.

Selective Service Information

When the supply of Priority I and Priority II physicians is exhausted, as will occur in the near future, the only source of physicians available for service as junior medical officers will be recent medical graduates who are obligated for military service under the basic Selective Service Law and other medical graduates who are in Priority III under the provisions of Public Law 779.

In order that this group may be available for service before older Priority III physicians are called the National Advisory Committee recommends that, until further notice, medical graduates be considered available for military service immediately upon completion of one year of internship, and be not recommended for deferment for residency training.

Hospitals should fill their residencies from:

(1) Medical graduates who already have had military service—a group which constitutes almost 80 per cent of current interns;

(2) Physicians who are being discharged from service, the number of whom now equals the number of physicians being called to active duty:

(3) Women and other physicians who are not obligated for military service.

The National Advisory Committee also recommends that hospital residents registered under the basic Selective Service law and those in Priority III under Public Law 779 be released when called by Selective Service and replaced by physicians from the above suggested groups.

Special consideration should be given to those who have only a few months to complete their training. These must be considered on an individual basis considering both the individual and the institution.

The Association

JMAG

Editoral Board Meeting

At a meeting of the Editorial Board and Contributing Editors of the *Journal of The Medical Association of Georgia* held at the Academy of Medicine, Atlanta, November 16, at 10:00 a. m., the following members were present: Drs. David H. Poer, Atlanta; Robert C. Major, Augusta; Charles Prince, Savannah; Arthur J. Merrill, Atlanta; Charles Hock, Augusta; Peter Scardino, Savannah; W. E. Storey, Columbus; Henry Tift, Macon; Alex Little, Valdosta; William Friedewald, Atlanta; and Messers. Sid Wrightsman, Jr., and Milton Krueger.

JMAG Editor Dr. David Poer presided and problems of policy and procedure for the *Journal* were discussed. The following action was taken:

1. *Approved*: In procuring material for publication for the JMAG the following procedures be instituted:

a. District societies be asked to submit all papers presented at their meetings for publication in the JMAG.

b. that residents be encouraged to submit material.

c. that internes be encouraged to submit material.

d. that specialty groups such as the Georgia Heart Association, etc., be encouraged to submit material.

e. that such sources as the Georgia and Emory Conferences, CDC, etc., be encouraged to submit material.

2. *Approved* that all material submitted to the JMAG for publication will be read by the Editor and members of Board and any material deemed unsuitable for publication will be read by at least two members of the Board before being rejected.

3. *Approved* that any doctor attending any meeting outside of the Association be urged to submit a report of that meeting to the JMAG for use as "filler" material.

4. *Approved* that a new editorial statement of the JMAG be written to include the new policies recommended at this meeting and this statement be sent to each member of the Board for approval and then be printed each month in the *Journal.*

5. *Approved* that in an effort to increase JMAG advertising revenue the text copy and the advertising copy appear on alternate pages in the back section of the *Journal.*

6. *Approved* that the AMA State Journal Advertising Bureau be notified that the JMAG does not wish to renew the yearly advertising contract for space on the front cover of the *Journal.* This space will be used for appropriate illustration, etc., and will permit change of cover color on occasion. A new JMAG cover will be designed to be used January, 1953.

7. *Approved* the policy of, on occasion, of devoting a whole issue of the *Journal* to some broad special subject such as a "Heart" issue, etc.

8. *Approved* the investigation of the possibility of publishing the Annual Directory of The MAG with other agencies publishing the same material, in an effort to save labor, expense and insure a more accurate Directory.

Recommended that the Book Review Section of the *Journal* remain the Editor's responsibility until such a time as more aid in this work is needed.

Recommended that engraving costs for illustrations appearing with material for publication remain the financial responsibility of the author.

Recommended that historical material for special articles be accepted as it comes in, without any special campaign to procure such material.

The meeting then met various members of the Atlanta Newspapers, Inc. and discussed with them some of the aspects of medical-press relationships (see Press Meeting Report). After this informal discussion the members of the Board and the members of the press adjourned for lunch served at the Academy.

Medical Pix Available

The AMA Committee on Medical Motion Pictures has announced publication of a new revised film list which includes 78 medical films not readily available from other sources.

This list will be available for distribution after December 1. A copy may be obtained by writing the Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn St., Chicago 10.

Informal

PRESS CONFERENCE

In an effort to create a closer spirit of cooperation between the medical profession and the members of the working press, an informal meeting of the members of the *Journal of the Medical Association of Georgia* Editorial Board and members of the Atlanta Newspapers, Inc. was held at the Academy of Medicine, Atlanta, on November 16, at 12:00 p.m. Representing the press were: Don Carter, City Editor, *Atlanta Journal;* Luke Green, City Editor, *Atlanta Constitution* and Reporters Katherine Barnwell, Edwina Davis and John Pennington.

JMAG Editorial Board members and Contributing Editors present were: Drs. David H. Poer, Atlanta; Robert C. Major, Augusta; Charles Prince, Savannah; Arthur J. Merrill, Atlanta; Charles Hock, Augusta; Peter Scardino, Savannah; W. E. Storey, Columbus; Henry Tift, Macon; Alex Little, Valdosta; William Friedewald, Atlanta; and Messers. Sid Wrightsman, Jr., and Milton Krueger.

Problems confronting the press in medical reporting were discussed and many solutions suggested. A closer liaison between the State Association and the press was planned and many methods of cooperation were instigated.

The journalists expressed their appreciation of the way these problems were discussed and felt that by such an informal meeting, rather than the high pressure press conference with forced public relations attitudes, there could be more accomplished toward a common purpose. The meeting was adjourned at 1:00 p. m. with the MAG as host to the press for lunch.

MAG Group Malpractice Insurer Advises Withdrawal of Group Coverage Plan

United States Fidelity and Guaranty Co.
Citizens & Southern National Bank Bldg.,
Atlanta 3, Georgia
October 21, 1952

To the Editor:

Re: PL-518—Medical Association of Georgia

For a good number of years we have had in force Group Professional Liability Policy issued to Medical Association of Georgia, which policy provided that any member of this Association desiring to protect his individual liability for malpractice claims could be insured under this master policy if he so desired.

For various reasons, this Company has decided to withdraw from underwriting Group Professional Liability Policies; therefore, you are hereby notified that Group Policy PL-518 is cancelled effective March 18, 1953, the anniversary date of the policy.

We would like to point out, however, that each doctor now presently insured under the above policy will continue to be insured until the expiration date stated in the present certificate which he holds.

I would like to further advise that this Company will, in the future, write this type of coverage only on an individual basis on a standard form of new Professional Liability Policy approved by the Insurance Department of the State of Georgia. If each doctor now presently insured under the above policy is interested in continuing this type of coverage after expiration of his certificate, we would suggest that he contact the agent who is now handling this coverage for him and make application for the individual policy to take effect upon expiration of his present certificate.

Yours very truly,
E. J. Reid, Superintendent,
Casualty Department.

News and Information

SPECIAL NOTE

The MAG Council will meet on January 11, 1953 at 11:00 a. m., at the Academy of Medicine, Atlanta. Also meeting at this date will be the Committee on Constitution and By-Laws.

ANNOUNCEMENTS

December 24: The Jefferson County Medical Society is scheduled to meet at 8:00 p.m. at the Jefferson Hotel, Louisville, Ga.

January 6: The Upson County Medical Society will meet at 7:30 p. m. at the Upson County Hospital.

January 6: The Spalding County Medical Society will hold their monthly meeting.

January 6: The Cobb County Medical Society will meet in the dining room of the Kennestone Hospital, Marietta.

January 8: The Habersham County Medical Society will hold their monthly meeting.

January 13: Colquitt County Medical Society will hold their monthly meeting.

January 21: Whitfield County Medical Society will meet at the Hamilton Memorial Hospital.

SOCIETIES

Fifth District Medical Society met at the Academy of Medicine, Atlanta, November 6, with the following scientific program: "Coronary Heart Disease: Theoretical and Practical Considerations," Dr. Richard J. Bing, Birmingham, Ala.; and "What Can We Do About Chronic Illness," Dr. Dean W. Roberts, Baltimore.

At an open meeting preceding the scientific session, President C. F. Holton of the Medical Association of Georgia spoke briefly and awarded the official Association Certificates of Appreciation to former-Secretary Edgar D. Shanks, and Past-Presidents Frank K. Boland, James E. Paullin (deceased), Allen H. Bunce, W. A. Selman and Edgar H. Greene (deceased), all of Atlanta, and W. S. Goldsmith, Stone Mountain.

The following Fifth District officers for 1953 were elected: Drs. Harry J. Lange, President; W. S. Dorough, Vice President, and C. Purcell Roberts, Secretary-Treasurer, all of Atlanta. Drs. Mark S. Dougherty, Jr. and J. G. McDaniel, both of Atlanta, were nominated as Councilor and Vice-Councilor, respectively, for election at the 1953 Annual Session, May 10-13, at Savannah. Dr. Wadley R. Glenn, Atlanta, was named Fifth District member on the Subcommittee on Public Health.

Third District Medical Society met at the Americus Country Club, Americus, November 20. The Sumter Medical Society were hosts for this session. After an address of welcome by Dr. Frank Wilson, III, of Leslie, the following papers were presented at the Scientific Session: "Treatment of Skin Tumors—Report of 436 Cases from Americus Tumor Clinic," Dr. R. C. Pendergrass, Americus; "Problems of Subarachnoid Hemorrhage, Dr. Lewis A. Hazouri, Columbus; Toxemia of Pregnancy, Dr. Richard Torpin, Augusta; "Cat Scratch Fever—Report of Two Cases," Dr. Bon M. Durham, Americus; "Early Human Embryo," Dr. C. H. Heuser, Augusta and "Coarctation of Aorta," Dr. Thomas Ross, Macon.

After a brief business session, a Smorgasboard dinner was served which was followed by an address from the Third Congressional District Congressman Rep. E. L. Forrester of Leesburg.

New officers elected for 1953 were: Dr. J. H. Robinson, III, President; Dr. P. L. Williams, Jr., of Cordele, Vice President, and Dr. T. Schley Gatewood, of Americus, Secretary-treasurer. Dr. C. F. Holton presented Dr. J. C. Patterson a Certificate of Appreciation awarded by the MAG for his distinguished service.

Sixth District Medical Society met at the State Health Building, Macon, December 3 at 2:30 p. m. for their Scientific Session. Presenting papers on the program were: Dr. Lowery Davenport, Macon,

"Common Respiratory Diseases—Recent Therapy"; Dr. Duncan Walker, Jr., Macon, "Management of Otitis Media Externa"; Dr. Thomas Ross, Jr., Macon, "Coarctation of the Aorta"; and Dr. James L. Caldwell, Macon, "Complication of Peripheal Vascular Disease." A social hour was held at the Idle Hour Country Club following the session and dinner was served at 7:00 p. m. The Auxiliary met in the afternoon and later joined the doctors at the social hour and dinner.

Bibb County Medical Society announced recently an annual lectureship series designed to bring outstanding medical authorities to Macon. Sponsored by Michael J. Witman in memory of his son, the series will be known as the Michael J. Witman Memorial Lecture.

Invited to speak at the first of the series on February 27, is Dr. Samuel Proger, Professor of Medicine at Tufts Medical School, Boston.

Georgia Medical Society held their monthly meeting November 11 in the Society Hall at 8:30 p. m. A prepared case report, "Term Labor Complicated by Bilateral Ankylosis of Hip Joints" was presented by Dr. Darnell L. Brawner and a paper on "Heart Disease in Pregnancy" was given by Dr. Harry T. Harper, Jr. Dr. William R. Dancy was presented with a Certificate of Appreciation in recognition of his distinguished services to the MAG as president in 1929-30. MAG President Dr. C. F. Holton awarded the Certificate for the MAG.

Thomas County Medical Society will meet at Thomasville, 4:00 p. m., December 17th for the following scientific program: "Obstetrical Problems," Dr. George A. Williams, and "Blood Dyscrasias," Dr. Milton Freedman, both of Atlanta.

Physicians from Second Medical District and northern section of Florida have been invited.

Ware County Medical Society met at the home of Dr. and Mrs. William Sharpe in Alma November 6. With Dr. H. T. Adkins, president of the society presiding, a business session convened. Dinner was served following this session.

DEATHS

GILES: *Dr. Jackson T. Giles,* 34, of Valdosta, died at his home November 4. Dr. Giles had been in a plane crash in 1949, at which time he suffered a broken back and other injuries. He had been in ill health since that time. Dr. Giles moved with his family to Valdosta from Griffin about eight months ago. He was a graduate of the Medical College of Georgia, 1943.

HOLLOMAN: *Dr. Alfred Leon Holloman*, 38, of Savannah, died October 20, after an illness of several weeks. Dr. Holloman graduated from Baylor University College of Medicine in 1938. He was formerly from Frederick, Oklahoma, coming to Savannah in 1944.

McGEE: *Dr. Harry H. McGee*, 51, of Savannah, died in the Duke University Hospital, Durham. N. C., where he had been undergoing treatment for the past eight weeks. He graduated from the Medical College of Georgia, 1924. Dr. McGee was a past president of the Georgia Medical Society.

PERSONALS

Dr. John M. Anderson, superintendent of the Topeka State Hospital, Topeka, Kansas, has resigned his position there, and will enter private practice in Atlanta. A native of Barnesville, Dr. Anderson is a graduate of the Medical College of Georgia.

Dr. Russell E. Andrews, Jr., of Rome, was recently appointed as plant physician at the Celanese Corp., Rome. Dr. Andrews will replace *Dr. Walter G. Hackett,* who has been called to mliitary duty at Gunter Air Base, Montgomery, Ala.

Dr. H. L. Barker, of Carrollton, was elected president at the regular monthly meeting of the Active Staff of Tanner Memorial Hospital.

Dr. Joseph L. Berg, of Albany, was recently admitted to the American Board of Ophthalmology.

Dr. William Lee Bridges, Jr. is now associated with Drs. C. S. Pittman, Jr. and Sr. at 822-24 Tift Ave., Tifton. His practice is limited to pediatrics.

Dr. J. Wallace Daniel, of Claxton, has been honored by friends who made a gift of a portrait of Dr. Daniel. The picture will remain in the Evans County Health Center. This gift was given in recognition of Dr. Daniel's service to the community in over 50 years of practice.

Dr. Haywood C. Derrick, a native of Sumter county, celebrated his 50th birthday anniversary in the practice of medicine in Oglethorpe.

Drs. G. A. Duncan, Floyd Sanders and *Howard Lee*, of Decatur, were entertained in their new offices at 603 Church St., Decatur, at an open house given by the wives of the physicians and the office staff.

Dr. R. E. Fokes, Jr., of Moultrie, has recently been included on the American Board of Ophthalmology.

Dr. H. D. Meaders, formerly of Newnan, opened his offices for a practice of obstetrics and gynecology in Marietta. Dr. Meaders will occupy the office of *Dr. Jack Hodges,* who has been called into Army service.

Dr. D. D. Merren, of Albany, has become associated with Dr. J. C. Keaton and Dr. J. Z. McDaniel, urologists.

Dr. Clarence W. Mills, of Atlanta, is the author of an article, "Simple Clinical Aid in Diagnosis of Hemorrhagic Pericardiac Effusion," published in the November 22 issue of the *Journal of the American Medical Association.*

Dr. Arthur Pruce, of Atlanta, announces the removal of his office to 1447 Peachtree Street, NE, Atlanta.

Dr. Alexander B. Russell, of Winder, has been elected President of the State Board of Medical Examiners.

Dr. Ernest Griggs Smith, Jr., of Atlanta, was married November 5 in the Little Chapel of Glenn Memorial Church, Atlanta. His bride was Miss Helen Claudine Crowe.

Dr. Mack Sutton, of Albany, spoke to the Moultrie medical group recently on the subject of the "Diagnosis of Poliomyelitis."

AUXILIARY

Third District Medical Society Auxiliary met November 20 at the Lawrence Memorial Hall, Episcopal Church, Americus. Addresses were given by Mrs. Ralph Fowler, president of the Woman's Auxiliary to the Medical Association of Georgia and Mrs. Leo Smith, president-elect of the Woman's Auxiliary to the MAG. Tea was served at the home of Mrs. T. Schley Gatewood.

Baldwin County Medical Society Auxiliary gathered at the home of the president, Mrs. E. Y. Walker at Milledgeville recently to honor Mrs. Ralph Fowler, Woman's Auxiliary to the MAG president and the organization's new members. At their November meeting the auxiliary voted to name their student loan fund in honor of Mrs. Charles H. Richardson, a leader in the organization for more than 15 years. This announcement was made on Mrs. Richardson's 84th birthday.

Dougherty Medical Society Auxiliary were guests at the Phoebe Putney Memorial Hospital, Albany, November 11. Plans for a Christmas party were discussed and committees appointed.

Muscogee County Medical Society Auxiliary heard Dr. Dave Berman, public relations chairman for the Muscogee County Medical Society at a luncheon meeting in Columbus, October 22. Mrs. George Comstock, president of the League of Women Voters also addressed the group.

Richmond County Medical Society Auxiliary designated the month of November as Public Relations Month. At their meeting November 25, they heard Mrs. Edgar Dunstan, Chairman of Civil Defense for the MAG Auxiliary and Mrs. Shelley C. Davis, Chairman of the Georgia Better Health Council. Col. W. W. Barr, Regional Director of Civilian Defense led a panel discussion.

Thomas County Medical Society Auxiliary, a newly formed auxiliary, met and discussed plans for their formal organization. Mrs. John Stillwell was named president of the new group. Mrs. Henry Pepin was chosen Vice-Presidentand Mrs. Rudolph Bell was elected Secretary and Treasurer.

HOSPITALS

A resolution has been adopted by the *Georgia Medical Society* lauding Mr. Reuben Clark, Chairman of Hospital Authority in Savannah for his leadership in assuring a new 300 bed general hospital for Savannah.

Members of the Medical Advisory Committee of the Richmond County Chapter, National Foundation for Infantile Paralysis recently inspected a Technicon-Huxley chest-abdomen respirator presented to the University Hospital, Augusta, by the local chapter.

Speaking at the annual press conference for representatives and sponsors of high school newspapers in the Atlanta area, Dr. C. C. Aven, of Atlanta, outlined some important provisions for tuberculosis patients, mentally ill patients and chronically ill patients in the planning for the new Grady Hospital.

The central inspection board of the American Psychiatric Association has recommended the establishment of hospitals for the mentally ill near Atlanta, Augusta and some town in south Georgia in addition to the hospital at Milledgeville. This was recommended in a 92 page report by the Association.

LETTERS

State of Georgia
Department of Public Health
June 10, 1952

To the Editor:

Will you kindly convey to the Medical Association of Georgia my appreciation for the great honor conferred upon me at the recent meeting of the Association in awarding the Hardman Cup. I regret very much indeed that circumstances prevented my being present in person to receive this award. As you know, I was appointed a delegate to the World Health Assembly at Gevena, Switzerland, during the month of May, an appointment which I could ill afford to turn down. I also appreciate very much the privilege granted to my son, T. F. Sellers, Jr., of receiving this award for me.

In accordance with the usual custom, I have returned the cup to the Association offices in order that it may be stored in the vault at the State Capitol for safe keeping after the inscription has been placed thereon.

Sincerely yours,
T. F. Sellers, M.D., Director

Thomasville, Georgia
November 6, 1952

To the Editor:

Enclosed is a clipping from the editorial page of *Colliers,* 11-15-52, (refering to the Doctor shortage in rural areas) rather apropos coming at the time when we were voting on Amendment 4. It is not a solution of the real problem of a doctor shortage. Neither is our Amendment No. 4. In fact the clause permitting the individual doctor to repay the loan in money defeats the purpose of locating a doctor in the small towns, however, it will help. I don't know how many men will be offered this scholarship annually nor how they will be selected. While $6,000.00 may not pay all of a medical education, it will go a long ways toward doing so. I would think to really reach the unusual good, ambitious, deserving poor boy, that the selection should be made in high school before his Pre-Med school, as a good many of the most desirable men possibly could not finance the Pre-Med expense.

The History of Medicine is full of poor men, especially in the South. Remember Sims, Wyeth, Long and many others who were the most progressive and inventive of all the doctors. To me poverty is the great stimulant, and creates the desire to improve and advance. A good brain in a poor man with ambition is much more valuable than the same brain in a so-called rich man without ambition. That makes it very important that the proper man is selected early and that it should not be a political selection. This makes the selection most difficult and most important that the selection be made by a group of unselfish, broad minded, non political citizens. I would think the majority of this committee be composed of practicing doctors of the highest integrity, men who have the unbounded confidence of their fellow doctors, and men of maturity—at least 45 years of age. It requires a certain age and experience to have the proper judgement to make such decisions. I am sure we have many such men and this will be a step forward in aiding the small towns and thus stopping a possible demand for state or socialized medicine.

I received a copy of the Habersham County Medical Societies Advertisement, "When You Need a Doctor." It is excellent and should be a stimulus and a guide to us and others. They can be justly proud of being a 'First' in a co-operative spirit and action among the doctors and their patients. One of the big and just complaints of the public, has been the difficulty and at times improbability of getting a doctor in an emergency and during the late hours at night. Such a unanimous action creates a better feeling and shows the doctors are endeavoring to solve a difficult problem. I hope my own and other County Societies will do likewise.

Sincerely,
Henry Moore, M.D.

BOOKS

REVIEWS

Correlative Neuroanatomy and Functional Neurology, 6th edition, by Joseph J. McDonald, M.D., Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital, N. Y.; Director of Surgical Services, Francis Delafield Hospital, N. Y.; and Joseph G. Cahsid, M.D., Attending Neurologist, St. Vincent's Hospital, N. W. Los Altos, California: Lange Medical Publishers, University Medical Publications. Price $4.00.

The title "A Dictionary of Neurologic and Neuroanatomic Terms" would seem more descriptive of the contents of this book than the one used. At times one has to guess at what the authors intend to say—e.g., on Page 53:

"B. Cranial Nerve II: The optic nerve contains nerve fibers arising from the inner layer of the retina which proceed posteriorly, some crossing to the opposite side via the optic chiasm, and enter the cranial cavity via the optic foramen."

By and large the diagrams and drawings are good. The sections on peripheral nerves are probably the best executed and doubtless would be found helpful

in a quick orientation in this segment of neurologic problems.

Richard Wilson, M.D.

Gynecologic and Obstetric Pathology—With Clinical & Endocrine Relations: By Emil Novak, A.B., M.D., D.Sc. (Hon., Trinity College, Dublin; Tulane), F.A.C.S., F.R.C.O.G. (Hon). 595 pages with 630 illustrations, 19 in color. Third Edition. Philadelphia and London: W. B. Saunders Company, 1952. Price $10.00.

The third edition of this standard work reflects thorough revision of some chapters, alteration of many sections, and numerous minor additions. The pages of the new edition are slightly larger than before, and the chapter and paragraph readings are more pleasing and easily read.

The chapter on the cervix deserves special commendation. The cervical changes in pregnancy are well described and illustrated. Hyperactivity of cervical epithelium during pregnancy to a point indistinguishable from carcinoma in situ is stressed, with emphasis on regression of such changes following the termination of pregnancy. Carcinoma in situ is thoughtfully and frankly considered. Difficulties in diagnosis are impartially presented. Dr. Novak concludes that many lesions which have been called carcinoma in situ probably represent nothing more than basal cell hyperactivity. This opinion is in agreement with that of many other meticulous clinicians and pathologists. Diagnostic methods for detecting carcinoma of the cervix are given rather detailed treatment, together with the advantages and disadvantages of various procedures. The value and limitation of diagnosis by the vaginal smear is treated in a direct and clear manner. Scattered throughout the book are excellent plates of vaginal smears, most of them in color. These represent a valuable addition.

An entirely new feature of the book is the chapter on common breast lesions of gynecologic interest. From the viewpoint of a general pathologist, this chapter is disappointing and inadequate. Some of the photomicrographs are of rather poor quality, and would serve only to confuse those already familiar with breast pathology. For example, the photomicrograph of adenosis of the breast would be extremely difficult for the uninitiated to distinguish from scirrhous carcinoma. In the text, adenosis is dismissed as being obviously benign, without discussion of occasional difficulties in microscopic interpretation. On the whole, however, Dr. Novak has probably performed a service by reminding the gynecologist that the breast falls within his sphere and should be examined routinely.

The book has been greatly enhanced by the addition of many well chosen, gross pictures and photomicrographs. A number of these are in color. Unfortunately, some rather darkly stained and uninformative, lowpower photomicrographs remain from the previous edition.

Throughout the book one is delighted to find "tidbits" of information as well as pictures of rather rare conditions. These include Paget's Disease of the vulva, sympathicotropic or hilus cells of the ovary, nad cystic lymphangioma of the ovary.

Everywhere the revision reflects the author's statement that the book represents a labor of love. On controversial subjects such as chorionepithelioma, his personal conclusions and views are clearly designated as such and are stated concisely and with dignity. The third edition will serve even more firmly to entrench this book as a classic in its field. It is warmly recommended to all those who have an interest in the subject.

Frederick H. Thompson, M.D.

BOOKS RECEIVED

The following books have been received and the courtesy of the publishers is gratefully acknowledged. Reviews of books that have particular interest to Georgia doctors will appear as space permits. Additional information in regard to all books received will be gladly furnished by this office.

Diseases of Metabolism Detailed Methods of Diagnosis and Treatment: Edited by Garfield G. Duncan, M.D., Director of Medical Division, Pennsylvania Hospital; Clinical Professor of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania. New, 3rd Edition. 1179 pages, Illustrated. Philadelphia and London: W. B. Saunders Company, 1952. Price $15.00.

Standard Values in Blood Being the first fascicle of a Handbook of Biological Data: Edited by Errett C. Albritton, A.B., C.D., Fry Professor of Physiology, The George Washington University. Prepared under the Direction of the Committee on the Handbook of Biological Data American Institute of Biological Sciences, The National Research Council. 199 pages. Philadelphia and London: W. B. Saunders Company, 1952. Price $4.50.

Practical Dermatology For Medical Students and General Practitioners: By George M. Lewis, M.D., F.A.C.P., Professor of Clinical Medicine (Dermatology), Cornell University Medical College; Attending Dermatologist, The New York Hospital; Secretary, the American Board of Dermatology and Syphilology. 328 pages with 99 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $7.50.

Ophthalmic Pathology An Atlas and Textbook: By Jonas S. Friedenwald, Helenor Campbell Wilder, A. Edward Maumenee, T. E. Sanders, John E. L. Keyes, Michael J. Hogan, W. C. and Ella U. Owens,

with the editorial assistance of Helen Knight Steward. Published Under the Joint Sponsorship of The American Academy of Ophthalmology and Otolaryngology and the Armed Forces Institute of Pathology. 489 pages with CCLX Plates. Philadelphia & London: W. B. Saunders Company, 1952. Price $18.00.

ELECTROCARDIOGRAPHY IN PRACTICE: By Ashton Graybiel, M.D., Captain, Medical Corps, U. S. Navy; Director of Research, U. S. Naval School of Aviation Medicine, Pensacola, Florida; Paul D. White, M.D., Executive Director, National Advisory Heart Council; Consultant in Medicine, Massachusetts General Hospital; Louise Wheeler, A.M., Executive Secretary, the Cardiac Laboratory, Massachusetts General Hospital; Conger Williams, M.D., Instructor in Medicine, Harvard Medical School; Associate Physician, Massachusetts General Hospital. New, 3rd Edition. 378 pages with 294 figures. Philadelphia and London: W. B. Saunders Company, 1952. Price $10.00.

NUTRITION AND DIET IN HEALTH AND DISEASE: By James S. McLester, C.D., Professor of Medicine Emeritus, University of Alabama; and William J. Darby, M.D., Ph.D., Professor of Biochemistry and Director of the Division of Nutrition, Vanderbilt University. New, 6th Edition. 710 pages with 14 figures and 145 tables. Philadelphia & London: W. B. Saunders Company, 1952. Price $10.00.

JMAG Article Cited

Dr. H. Earle Conwell, M.D., of Birmingham, whose article "Certain Problems in Fracture Treatment" published in the August *Journal of the Medical Association of Georgia* has received excellent comment on this work republished as part of the article's condensation in the November issue of the *Current Medical Digest.* Reprinted here is the comment of Louis N. Rudin, Editor of *Physical Medicine,* who reviewed Dr. Conwell's work in the *Digest.*

Comment. This is a very comprehensive and excellent article. It is commendable that in a short treatise covering a vast field, the author gives ample space and emphasis to physical therapy. His stress on simple measures of hydrotherapy, massage, and active exercise, rather than machine treatment, is proper.

The author's criticism of the wave of enthusiasm for the ambulatory treatment of fractures and the reference to early weight-bearing is properly taken, but only in regard to its possible effect on the callus and bone repair. When one realizes that many patients with a fracture in the neighborhood or even far from a joint become cripples due to the ankylosis of these joints, early ambulation is not mere faddism.

In fractures we face two antagonisms. The fractured bone needs rest, while the muscles, ligaments, and joints need motion. Proper management must reconcile and compromise between these two conflicting phenomena. Waiting until the union is solid beyond any doubt and then worrying about the muscles and joints is bad, because during this time in many cases irreversible changes will occur such as atrophy of muscles, fibrosis of the capsule, and ankylosis of the joint, and no amount of physical therapy will be of value.

Hence, early ambulation while not ideal from the standpoint of its effect on the callus, nevertheless, is justified, because it is a means of prevention of muscle atrophy and stiff joints.

LOUIS N. RUDIN, M.D.
Editor for Physical Medicine

About our Contributors

EDWARD WEISS, M.D., of Philadelphia, is the author of "The Psychosomatic Concept in General Medicine." Dr. Weiss is a graduate of the Jefferson Medical College of Philadelphia, 1917. He is a member of the American Board of Internal Medicine.

RICHARD KING, M.D. and JOHN S. WALKER, M.D., of Atlanta, collaborated on the article "Congenital Atresia of the Esophagus and Esophagotracheal Fistula." Dr. King graduated from the University of Tennessee College of Medicine, 1936, and is a member of the American Board of Surgery. Dr. Walker is a graduate of the Jefferson Medical College of Philadelphia, 1946.

EUGENE L. GRIFFIN, M.D. and WILLIAM V. GOLKOWSKI, M.D., of Atlanta, are the co-authors of the article "Use of Hyaluronidase as an Adjunct to Novacain in Pudendal Block Anesthesia." Dr. Griffin graduated from Emory University School of Medicine, 1936, and is a member of the American Board of Obstetrics and Gynecology. Dr. Golkowski, former resident in the Department of Obstetrics and Gynecology, Crawford W. Long Memorial Hospital, is a graduate of Albany Medical College, 1948.

FRED E. MURPHY, M.D., of Thomasville contributed the article "Intramedullary Fixation." Dr. Murphy graduated from University of Maryland Medical School, 1940.

MILFORD B. HATCHER, M.D., and MAX MASS, M.D., of Macon, are the co-authors of the article "Operative Cholangiography." Dr. Hatcher graduated from the Medical College of Georgia, 1935, and is a member of the American Board of Surgery. Dr. Mass, a graduate of the University of Minnesota Medical School, 1930, and is a member of the American Board of Radiology.

UNIVERSITY OF CALIFORNIA
Medical Center Library

THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

Books not returned on time are subject to a fine of 50c per volume after the third day overdue, increasing to $1.00 per volume after the sixth day. Books not in demand may be renewed if application is made before expiration of loan period.

v.41 Medical association of Georgia. 88799
1952 Journal.

JUN 14 1954
MAR 17 1955
MAY 19 1955
7 DAY
SEP 27 1957

INTER-LIBRARY LOAN
JUL 20 1962
7 DAYS AFTER RECEIPT
C U - Berkeley
RECEIVED
AUG 2 1962

7 DAY
RETURNED
JUL 6 1962
JUL 3 1962

RETURNED
NOV 9 1965

5m-7,'52(A2508s2)4128

ST

UCSF Library
3 1378 00841 0956

88799